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PSYCHOLOGICAL ABSTRACTS

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WALTER S. HUNTER, CLARK UNIVERSITY

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CONTENTS

General 5571–5607
Sensation and Perception 5608–5643
Feeling and Emotion 5644–5648
Attention, Memory and Thought 5649–5657
Nervous System 5658–5689
Motor Phenomena and Action 5690–5730
Plant and Animal Behavior 5731–5754
Evolution and Heredity 5755–5778
Special Mental Conditions 5779–5834
Nervous and Mental Disorders 5835–5911
Social Functions of the Individual 5912–5983
Industrial and Personnel Problems 5984–6012
Childhood and Adolescence 6013–6051
Educational Psychology 6052–6113
Biometry and Statistics 6114–6118
Mental Tests 6119–6129

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AUTHOR INDEX

Asll, A., 5912
Abdun-Nur, E. A., 5649
Abe, S., 5608
Abély, P., 5835
Abély, X., 5835
Aburel, E., 5690
Ach, N., 5779
Adams, R. D., 5599
Adler, M. J., 5980
Alexander, F., 5780
Allee, W. C., 5913
Allen, C., 5836
Altenburger, H., 5658
Alvarez, J. C., 5837
Anderson, S. E., 5571, 5572
[Anon.], 5838, 5914
Ansart, M. B., 5691
Arlitt, A. H., 6013
Armentrout, W. D., 6063
Armstrong, C. P., 5915, 6014
Augenreich, E., 6052
Avery, G. T., 5573

Bain, R., 5916
Bally, C., 5917
Baonville, H., 5839
Bartholomé, H., 5692
Bartholomew, W. T., 5918
Bartlett, W. B., 5574
Baudouin, C., 5781, 6015
Baumgarten, F., 5652, 5984
Beers, F. S., 5920
Benda, C. E., 5782
Bennett, A., 6053
Beresina, M., 5659, 5660
Bergler, E., 5783
Berlit, —, 5840
Berman, H. H., 5841
Berman, R. L., 5989
Bernard, J., 5919
Betta, E. A., 5584
Bhatia, B. B., 5661
Binswanger, L., 5842
Bird, C., 5920
Birnbaum, K., 5784
Bishop, G. H., 5674
Bixler, R. W., 6054
Bleuler, M., 5830
Blinkovski, —, 5800
Bonaparte, M., 5785
Bond, F. B., 5786
Bonte, T., 5787
Borel, A., 5843
Boring, E. G., 5575
Boynton, E. P., 5662
Braga, E., 6055
Braia, W. R., 5844
Braun, E., 5788
Bressler, J., 5609
Brew, M. F., 5845
Brill, A. A., 5789
Briscoe, G., 5693, 5694
Brotherston, B. W., 5876
Brown, J. F., 5650
Brown, M. W., 5846
Brown, T. G., 5577
Bruce, W. F., 6056
Brueckner, L. J., 6057, 6058
Budkiewicz, J., 5985
Bühler, C., 5931, 6016
Burn, J. H., 5661
Busemann, A., 6039

Cacchione, A., 5856
Campbell, C. G., 5755
Cannon, A., 5847
Cannon, W. B., 5663
Cantril, H., 5922
Capgras, J., 5848
Capri, A., 5682
Carey, G. L., 5943
Carpenter, W. S., 5849
Cary, W. E., 5913
Catel, W., 6017
Cénac, M., 5843
Chapin, F. S., 5980
Chauchard, A., 5690
Chauchard, E., 5690
Chen, W. K.-C., 5923
Chiba, T., 5644
Claude, H., 5850, 5851
Clem, O. M., 6060
Cochran, M., 5924
Coghill, G. E., 5664
Cohen, M., 6018
Collet, F. J., 5610
Cooper, S., 5665
Cooperman, N. R., 5809
Coriat, I. H., 5925
Costedoat, A., 5852
Cotton, F. S., 5695
Coulon, —, 5835
Craig, A. T., 6114
Crider, B., 5898
Cronbach, A., 5926
Cronin, H. J., 5853
Curry, M. A., 5862
Cushing, H., 5666

Dagnelie, J., 5854
Daniélopolu, S., 5667
Darley, J. G., 5986
Darrow, C. W., 5578
Da Silveira, N. M., 6061
Davis, H., 5687
De Groot, A. W., 5927
Dernowa-Yarmolenko, A. A., 5696
De Sanctis, S., 5855, 5856
De Saussure, R., 5790
Deschamps, —, 5878, 5879
Deutsch, F., 5791
D'Heucqueville, G., 5874
Dill, D. B., 5697
Dobson, M., 5611
Dodge, R., 5698
Dodge, S. B., 6060
Doll, E. A., 5857
Drake, R. M., 5928
Drury, A. N., 5699
Dubilneau, J., 5867
Dubuisson, M., 5741
Dudycha, G. J., 6019
Dudycha, M. M., 6019
Dulsky, S. G., 5987
Dunn, M. W., 6076
Du Preez, N., 5997

Eaton, H. S., 5929
Ebbers, H., 5792
Eccles, J. C., 5668
Edwards, H. T., 5697
Ehrenstein, W., 5793
Elder, J. H., 5731
Ellenberger, —, 5848
Elster, A., 5930
Endicott, F. S., 6062
Erhardt, A., 5997
Erickson, M. H., 5794
Eurich, A. C., 6121
Evrard, E., 5858
Ewald, G., 5859

Fahrenfort, J. J., 5931
Faillie, R., 5579
Fay, T., 5860
Feigenbaum, D., 5795
Feilchenfeld, W., 5580
Feng, T. P., 5660, 5669
Fenichel, O., 5796
Ferree, C. E., 5581
Fessard, A., 5700
Fessard, A. B., 5700
Finckh, J., 5861
Firestone, F. A., 5613
Fischer, C. H., 6115
Forbes, A., 5722
Forbes, A. W., 5756
Foundillère, R., 5800
Fraser, J. A., 5988
Fraser-Harris, D. F., 5612
Frasier, G. W., 6063
Freeman, F. N., 6020, 6064
Freeman, H., 5797
Frois-Wittman, J., 5798
Fromherz, H., 5670
Fuller, R. G., 5892

Gage, F. H., 5582
Garvey, C. R., 5701
Gaspar, J., 5932
Gasser, H. S., 5671
Gaudet, F. J., 5862
Gaw, E. A., 5732
Geiger, P. H., 5613
Geissler, G., 5933
Gelb, A., 5614, 5934
Gerberich, J. R., 6065, 6066
Gibbs, O. S., 5702
Gilmer, B. v. H., 6021
Glover, E., 5799
Goldberg, N., 5583, 5935, 6067
Goldstein, K., 5615, 5863
Goodfellow, L. D., 5616
Gorodzov, V. A., 5936
Graham, H. T., 5671
Granit, R., 5617, 5668, 5672
Graucob, K., 6022
Gray, W. S., 6068
Green, H. J., 5989
Greene, H. A., 5584, 6069
Grégoire, A., 6023
Grund, E., 5937
Grundfest, H., 5673
Guiler, W. S., 6070
Guillaume, G., 5938
Gurevich, M., 5703
Gurnee, H., 5595

Hakebush, —, 5800
Hall, C. W., 6071
Hammerschlag, V., 5757
Hammonds, M., 5704
Harding, D. W., 5990
Harding, G. T., 5864
Harlow, H. F., 5754
Härnik, J., 5801
Harrington, M., 5865
Hart, H., 5902
Hartmann, G. W., 5618, 6072
Hartree, W., 5705
Hartridge, H., 5585
Hauser, R., 5586
Hawley, J. M., 5733
Hayasaka, C., 5802
Hayes, E. D. T., 5847
Heinbecker, P., 5674
Heindl, R., 5939
Heinze, H., 5645
Held, O. C., 6073
Helsmoortel, J., 5770, 5866
Herbst, E. K., 6045
Hermann, I., 5734
Heron, W. T., 5587
Herrman, J., 5997
Herzfeld, E., 6024
Hetzer, H., 6025, 6119
Heuyer, G., 5867, 5868, 5869
Hildreth, G., 6074
Hill, A. V., 5670
Hines, M., 5662
Hirschfeld, M., 5803
Hitschmann, E., 5804
Hodgson, P., 5683
Hoffman, H. F., 5870
Holmes, G., 5675
Holzinger, K. J., 6116
Hopkins, L. T., 6075
Horowitz, J., 5802
Hoven, H., 5871, 5872
Howell, E., 6076
Huizinga, E., 5735, 5736
Hulin, W. S., 5588
Hull, C., 5607
Hunt, H. R., 5755
Husells, T., 5589

Ivy, A. C., 5646

Jacobs, M. H., 5619
Jaensch, E. R., 5590
James, W. T., 5706
Jankowska, A., 6120
Jekels, L., 5805
Jelliffe, S. E., 5806
Jenkins, R. L., 5758
Jespersen, O., 5940
Joaki, E., 5848
Jones, C., 6066
Jones, V., 6077
Jones, W. B., 6078
Jonnard, R., 5579
Jordan, A. M., 5759, 6079
Jordan, H. J., 5676
Jordan, R., 5737
Jung, C. G., 5807

Kantor, J. R., 5591
Karn, M. N., 5776
Karpman, B., 5941
Kasell, L., 6080
Katz, D., 5707
Katzenstein, B., 5991, 5992
Keilhacker, M., 6081
Kekcheev, K. S., 5993
Kelley, V. H., 6069
Kelsen, H., 5808
Kinney, L. B., 6121
Kleinschmidt, —, 5942
Kleitman, N., 5809
Klemm, O., 6082
Klestchov, S. V. 5708
Kline, L. W., 5943
Klotz, B., 5874
Knoll, W., 5810
Koch, H., 5994
Kodera, Y., 5677
Köhn, W., 5760
Koller, L., 6119
Konradi, G., 5995
Korngold, S., 5709
Kosawa, H., 5811, 5812, 5813
Kowalski, W., 5996
Krechevsky, I., 5738
Kreuger, F., 5997
Kroll, F. W., 5658
Kroll, G., 6026
Kropp, B., 5739
Krüger, G., 5998
Kulp, D. H., II, 6083
Kuypers, A., 5814

Labat, G., 5873
Lacan, J., 5868
Lagache, —, 5869
Laignel-Lavastine, 5874
Lambert, E., 5722
Lambeth, M., 5944
Lammermann, H., 6084
Langworthy, O. R., 6027
Lanier, L. H., 5946
Lapicque, L., 5710
Lapicque, M., 5711
Laugier, H., 5700
Ledebur, J. F. v., 5678
Le Gras, A. M., 5761
Legrün, A., 5945
Lehrer, L., 6028, 6085
Leister, F., 5620
Lesser, A., 5946
Levine, M., 5712
Levy, D. M., 6029
Levy, J., 5947
Levy-Suhl, M., 5815
Lewis, A., 5762
Lewis, N. D. C., 5875
Ley, J., 5839
Liao, W. K., 5948
Liberson, W., 5713
Liebers, —, 5651
Lifshitz, S., 5621
Lindworsky, J., 5816
Link, M., 5763
Lintvareff, V. S., 5592
Lippmann, O., 5652
Little, C. C., 5755
Loewenstein, R., 5817
Lopes, E., 6122
Lovell, H. T., 6086
Low, A. A., 5899
Lowell, H. T., 5653
Lowie, R. H., 5949, 5950
Lowrey, L. G., 5876
Lübke, K., 6087
Lucherini, T., 5877
Luckiesh, M., 5622
Lullies, H., 5676
Lund, S. E. T., 5764
Luria, A., 5951, 6030
Lyman, R. L., 6088, 6089

Macewicz, P., 5999
Mahler, W., 5714
Maidl, F., 5740
Makarow, I., 6002
Mallart, J., 6000
Malsberg, B., 5892
Manson, J. S., 5765
Marbe, K., 5715, 5818
Marchand, L., 5878, 5879
Marcu, I., 5667
Marcus, G., 5952
Marcus, G. F., 5880
Marquès, P., 5713
Masquin, P., 5850, 5851
Marquis, D. P., 6036
Marsh, L. C., 5881
Martinengo, V., 5726
Marucci, A., 5647
Matthes, K., 5679
Mayer, J., 5953
Mayou, M. S., 5623
McCartney, J. L., 5954
McDougall, W., 5882
McDowell, R. J. S., 5680
McGeoch, J. A., 5716
McGilvray, E. B., 5624
McRae, C. R., 6090
McSwiney, B. A., 5681
Mead, M., 5955
Meenta, I. G., 6031
Merry, F. K., 5625
Merry, R. V., 5625
Mikulski, K., 6091
Miller, V. L., 6036

(Continued on Inside Back Cover)

PSYCHOLOGICAL ABSTRACTS

VOL. VII, No. 12 DECEMBER, 1933

GENERAL

5571. **Anderson, S. E. Psyche, the immortal. IV. The mechanism of consciousness.** *J. Amer. Soc. Psych. Res.*, 1933, **27**, 263–267.—This article, dealing with alleged electrical and chemical implications of consciousness, consists mostly of extracts from Sherrington, McDougall, G. W. Stewart, the Encyclopedia Britannica, and other authorities, with some speculative views of the writer added.—*W. F. Prince* (Boston).

5572. **Anderson, S. E. Psyche, the immortal. V. Checking the mechanism.** *J. Amer. Soc. Psych. Res.*, 1933, **27**, 300–308.—The writer continues his series of articles by the same method: quotation, inference and speculation. The discussion concerns the physiological and chemical basis, or at least active concomitants, of consciousness. The discussion of the functions of electricity, adrenalin, phosphorus, lecithin, etc., is closed with humorous verses by Saxe.—*W. F. Prince* (Boston).

5573. **Avery, G. T. Proceedings of the Rocky Mountain Branch of the American Psychological Association, November 25 and 26, 1932.** *Psychol. Bull.*, 1933, **30**, 384–386.—*J. F. Dashiell* (North Carolina).

5574. **Bartlett, W. B. The rotating sectored disc.** *Rev. Sci. Inst.*, 1931, **2**, 96–110.—The author gives analytic formulae for predicting the characteristics (number, intensity) of stationary shadows appearing under defined conditions on black and white sectored discs turning at variable speeds and lighted by a source intermittently flashing or with periodically variable intensity.—*M. G. Willoughby* (Clark).

5575. **Boring, E. G. Amerikan ruhiyati.** (American psychology.) (Trans. by M. Sherif.) Istanbul: Remzi Kitaphanesi, 1933. Pp. 136.—A Turkish translation of E. G. Boring, *A History of Experimental Psychology*, 1929, pp. 493–532, 538–563, 580–589.—*M. Sherif* (Izmir, Turkey).

5576. **Brotherston, B. W. The primitive mental attitude and the objective method.** *Monist*, 1933, **43**, 257–267.—The objective method in the study of mind regards man as an organism and studies his behavior in the same manner that lower organisms are studied, attempting to show an unbroken line of development from animals to man. It attempts to show that evolution from animal to human mind is a passage from problem solving by trial and error to problem solving by reflective thinking. But man's mind seems to have departed from this course at the primitive human level, when magic and religious ritual came to dominate most of man's activity. For a long time man manifests his intelligent adaptability only in special situations, but is usually dominated by a super-individual element of social origin (according to Durkheim), or a native property of the individual consciousness (according to others). The author inclines to the latter view, identifying the devotion to magical and religious activity with the deeper sources of human motivation which govern general problem solving as contrasted with the special motivating mechanisms involved in solving particular situations. In short, problem solving steadily evolved, but for a long time was attempted along too broad lines. Every special problem was regarded as a case of general problem solving. This inappropriate method persisted in the form of a blanket ritualistic solution intended to cover all special cases. Reflective thought was present, but had still to evolve proper method and technique.—*C. M. Diserens* (Cincinnati).

5577. **Brown, T. G. A new differential aesthesiometer.** *J. Physiol.*, 1933, **77**, 16P–17P.—An instrument to test the possibility of the sensory localization of a heat stimulus as such is described and diagrammed.—*M. A. Rubin* (Clark).

5578. **Darrow, C. W. A photographic technique for the study of extensive data on small populations.** *Science*, 1933, **78**, 61–62.—Description of a method which would facilitate the study of interrelationships among extensive clinical observations applicable when there are a great many data on a relatively small population (less than 100 cases). The method consists essentially in the arrangement, mounting and blue-printing of the table of data so that rearrangement or study of the data with regard to two different dimensions is made possible.—*P. Seckler* (Radcliffe).

5579. **Faillie, R., & Jonnard, R. Nouveau dispositif pour la mesure des temps de réactions psychomotrices.** (A new device for measuring reaction time.) *Trav. humain*, 1933, **1**, 210–214.—An electromagnet lifts a tooth from a channel on the shaft of the chronoscope hand, whereupon a spring puts the hand in gear with the motor. Another pair of magnets pulls the hand out of gear. Another magnet operates a set-back by means of a cam arrangement. Calibrating against an oscillograph shows the chronoscope to be much more accurate than the d'Arsonval. —*H. E. Burtt* (Ohio State).

5580. **Feilchenfeld, W. Gedanken über eine Psychologie der Situation.** (Thoughts regarding a psychology of situations.) *Arch. f. d. ges. Psychol.*, 1933, **87**, 161–182.—This study is an attempt to determine the nature of a "psychology of situations" where by situation is meant a concrete, active relationship existing within the consciousness of a human being. An illustration: in the same situation all men will behave in the same manner. In all situations some readiness to respond is involved, hence a practical inquiry into the psychology of situations would begin with a study of readiness; or, conversely, a knowledge of situations must be secured before the

important psychological phenomenon of readiness may be investigated.—*W. D. Ellis* (Mass. State College).

5581. **Ferree, C. E., & Rand, G. A new type of instrument for testing the light and color sense.** *Amer. J. Ophth.*, 1931, **14**, 325–333.—The authors' photoptometer consists of a light source composed of a diffusing surface illuminated by a standard lamp, the image of which is projected upon a second diffuser by means of an optical system comprising a regulating diaphragm and colored filters, and the image from this screen is projected by an optical system (in which the form and size of the luminous field can be defined) to the level of the nodal point of the eye, so that the entire light of the field penetrates the eye without loss, and so that the pupillary diameter does not intervene. This is the set-up used in France for several years by Fabry and Buisson and also used in the Piéron spectrocolorimeter.—*M. G. Willoughby* (Clark).

5582. **Gage, F. H., & Shaxley, J. H. Modification of speech sounds in passing through acoustic filters.** *J. Physiol.*, 1933, **77**, 16P.—The type of hearing associated with high-note deafness can be roughly imitated by the sounds transmitted by a speaking tube in which is included a low-pass acoustic filter consisting of a brass tube forming part of the conduit through which the sounds pass, pierced with a series of rings of holes, each ring opening into a separate short cylindrical chamber, concentric with the central brass tube.—*M. A. Rubin* (Clark).

5583. **Goldberg, N. [William James.]** *Unser Shul*, 1933, **3**, No. 2, 8–13.—An exposition of some of James' psychological views on emotion, habits, and memory.—*D. Shakow* (Worcester State Hospital).

5584. **Greene, H. A., & Betts, E. A. A new technique for the study of oral-language activities.** *Elem. School J.*, 1933, **33**, 753–761.—The authors present data on the percentage of errors made by ordinary recording devices and a description of a new language recording apparatus. The apparatus may be used for a variety of recording purposes.—(Courtesy *J. Educ. Res.*)

5585. **Hartridge, H. The future of the cathode-ray tube.** *J. Physiol.*, 1933, **77**, 39P–41P.—*M. A. Rubin* (Clark).

5586. **Hauser, R. Lehrbuch der Psychologie.** (Textbook of psychology.) Freiburg: Herder, 1933. Pp. vi + 135. 3 RM.—The book is intended primarily for instruction of philosophical propaedeutics in higher schools. The author begins with the contemporary trend of the totality and Gestalt psychology. Therefore, he deserts the conventional order of subject matter, believing that by so doing he obtains greater naturalness and better organization. Mental life is represented as the goal of endeavor, the body of the guided whole, whose limits partly are determined involuntarily (instincts, customs) and partly are desired by the insertion of the ego on the impression of a judgment. The viewpoint of totality is the foundation for the consideration of processes of perception especially (as in *The Formation of Object Structures*). The presentation of feeling follows F. Krueger's ideas. From the general picture of mental life, the student will grasp the principal tendency of modern psychology. Short sections treat the differences in capacities and mental development up to maturity; then the role of the nervous system in mental life as a bridge to philosophical, neighboring questions (mind-body, mind-soul, ego, personality). Support is drawn from Aristotelian logic in order to create a foundation capable of bearing philosophical treatment for a wide circle of readers. Simplicity is sought in clearness of speech. Unnecessary terms, especially foreign words, are avoided. The unavoidable ones are explained.—*R. Hauser* (Vienna).

5587. **Heron, W. T. An automatic recording device for use in animal psychology.** *J. Comp. Psychol.*, 1933, **16**, 149–158.—"A maze for rats is described which incorporates certain novel features. An attachment . . . enables it to be converted quickly into a multiple light-discrimination apparatus. An automatic recording device is described which may be used with any maze by putting metal plates at critical points on the floor of the maze. Automatic turntables and the method of their control are also described." Any number of rats up to 54 may be run through the apparatus without supervision.—*N. L. Munn* (Pittsburgh).

5588. **Hulin, W. S. Psychology.** *Amer. Yrbk.*, 1932, 796–803.—A review of American psychology for the year 1932. Mention is first made of the chief psychological meetings held during the year, together with a list of the topics which came up for discussion. The review is mainly concerned with the leading books and articles of the year, which are classified and abstracted under the headings of perception, method, affection, modifications of response, complex processes, physiological and comparative psychology, and applied psychology.—*H. W. Karn* (Clark).

5589. **Huzella, T. A pszichológia és a biológia kapcsolatai.** (Relation of psychology to biology.) *Magyar Psychol. Szemle*, 1932, **5**, 15–32.—The author discusses the relations of psychology to biology which the modern synthetic method of thought is establishing.—*D. Shakow* (Worcester State Hospital).

5590. **Jaensch, E. R. Die Lage und die Aufgaben der Psychologie, ihre Sendung in der deutschen Bewegung und an der Kulturwende.** (The position and problems of psychology; its mission in the German movement and at the new cultural turning-point.) *Zsch. f. Psychol.*, 1933, **129**, 291.—Cited by title only; to be published separately.—*R. B. MacLeod* (Swarthmore).

5591. **Kantor, J. R. A survey of the science of psychology.** Bloomington, Indiana: Principia Press, 1933. Pp. 564.—The volume offers to students an exposition of organismic or interactional psychology; it is a new work altogether and not a simplified version of the author's *Principles of Psychology*. One of the assumptions of the organismic viewpoint is that psychology has its own subject matter, and that psychological phenomena are very specific interac-

tions between organisms and stimulating objects. The interaction view allows the student to look upon psychological phenomena as objective natural happenings, and one does not have to reduce his data to actual or hypothetical, neural or general biological events. It is no longer necessary in order to make psychology scientific to restrict descriptions to comparatively simple activities such as reflexes or habits. Wherever possible the author has attempted to indicate the experimental treatment of the various topics. There are chapters and references on practically all of the customary topics of general psychology, and the last three chapters are on the evolution and development of organisms, man as a biological organism, and man as a cultural organism. —*H. Cason* (Wisconsin).

5592. **Lintvareff, V. S. [The audition box.]** *Psikhotekhnika i psikhofiziol. truda*, 1931, **4**, 151–155. —The apparatus consists of a square box which is 1.05 m. on each side and which is divided into 100 compartments; at each point of disjunction there is an electro-magnet with a vibrator. The single and double walls make the localization of the noise very difficult when the current is transmitted in one of the vibrators. An uninterrupted noise released by an electro-magnet at the same time that the noise is to be localized makes the task very delicate. The apparatus is meant for the examination of workers who must supervise the work of a motor and must be informed of irregularity by variations of noise.—*M. G. Willoughby* (Clark).

5593. **Miner, J. B. The significance and history of the clinical section of the A.P.A.** *Psychol. Exch.*, 1932, **1**, 7–11.—*J. F. Dashiell* (North Carolina).

5594. **Mitchell, W. The place of minds in the world.** New York: Macmillan, 1933. Pp. 399. $4.50. —*R. R. Willoughby* (Clark).

5595. **Moore, J. S., & Gurnee, H. The foundations of psychology.** (2nd ed.) Princeton: Univ. Press, 1933. Pp. 287. $3.00.—In this edition the section on behaviorism has been revised, sections on Gestalt psychology and purposivism have been added, and the references have been brought up to date. The volume is divided into three parts, dealing respectively with the definition of psychology, the relation of psychology to philosophy and the sciences, and the postulates of psychology. In the last division chief attention is given to the mind-body problem and to the subconscious.—*W. S. Hunter* (Clark).

5596. **Poffenberger, A. T. A history of the National Research Council, 1919–1933. VIII. Division of Anthropology and Psychology.** *Science*, 1933, **78**, 158–161.—A presentation of the objectives and activities of this division from the time of the consolidation of psychology and anthropology, including the work of various committees and conferences. A list of the persons who have served as chairmen since the organization of the division is included.—*P. Seckler* (Radcliffe).

5597. **Rosen, H. R., & Roberds, W. M. A device for measuring intensity of illumination.** *Science*, 1933, **78**, 241–242.—The author describes a homemade equipment for measuring intensity of illumination which costs less than one third the amount asked by professional houses for a similar equipment. The materials consist of one Weston photronic cell, a Weston galvanometer, model 440, a three-way toggle switch and small lengths of copper wire for shunts and connections. The cell is connected directly across the galvanometer, which may be shunted to give the desired range. The three-way switch will allow four ranges. It connects a shunt for each position, and the most sensitive range is obtained with the switch in the neutral or open position. Each position of the switch may be calibrated in terms of foot-candles by means of ordinary electric lamps of known candle power, at measured distances. When the galvanometer is shunted with the proper resistance and used with the photronic cell, intensities of illumination from 10 to 15,000 foot-candles may be measured accurately and the deflection is strictly proportional to the illumination over these ranges.—*H. W. Karn* (Clark).

5598. **Schaub, E. L. Spinoza: his personality and his doctrine of perfection.** *Monist*, 1933, **43**, 1–22.—Spinoza offers a remarkable example of the integration of life and thought. His philosophical conclusions are a reflection of personal experience, and his life a complete embodiment of his philosophical convictions. This is a rare achievement, yet the examination of Spinoza's work reveals certain persistent conflicts, viz., between the demands of the ethical or value-seeking consciousness, a product of his social heredity, and the new scientific or mathematical spirit peculiar to the Cartesian period. This resulted in several distinct and sometimes opposed strains of motivation in Spinoza's thinking, expressed in the double view of nature as *natura naturata* accompanied by preoccupation with abstract timeless essences, or *natura naturans*, where Spinoza's concern seems to be with a dynamic system of concrete existences. This duality of viewpoint appears elsewhere, as in his doctrines of volition and emotion, so that it is probable that Spinoza's philosophy is but a partially successful attempt to bring into a rationally unified system the affirmations of the several regions of experience which he explored. Spinoza's motivations were multiple and his philosophy included irreconcilable doctrines.—*C. M. Diserens* (Cincinnati).

5599. **Seashore, R. H., & Adams, R. D. The measurement of steadiness: a new apparatus and results on markmanship.** *Science*, 1933, **78**, 285–287. —An improved apparatus for the measurement of steadiness in fine eye-hand coordinations is described. A battery of tests was formed including (1) the eye-hand coordination test, (2) the ataxiameter, (3) the ataxiagraph, and (4) a rifle steadiness test. In studying the problem of motor "abilities" it was found that intercorrelations between these tests indicate that they are fairly consistent in measuring the same phenomenon.—*S. H. Newman* (Clark).

5600. **Sternberg, K. Naturwissenschaftliche und geisteswissenschaftliche Psychologie.** (Psychology

as a natural and as a mental ("spiritual") science.) *Arch. f. d. ges. Psychol.*, 1933, **87**, 129–160.—Psychology reflects cultural developments; its methods and aims change as society changes. Today no less than in the 18th century we must remember the Kantian attitude toward any science: not *is* the science possible, but *how* is it possible for this science to be? The best attack upon this problem is that proposed by Lewin and carried out by Hönigswald. "Thingness" in the external world is not only objective but subjective as well. "Things" demand experienceability and are therefore a synthesis of being and the ego. In this sense natural science and mental science are indispensable to each other, but one should not forget that integral to mental science is the realm of values. Just as mathematics resides in, yet passes beyond logic, so does natural science depend upon yet outdistance mathematics. Now since psychology (a branch of biology) is one of the natural sciences but also a science of mental events, in this manner one can distinguish the inclusion in natural science of values and hence the whole realm of spirit. Psychology is a bridge between the natural and the mental ("spiritual") sciences.—*W. D. Ellis* (Mass. State College).

5601. **Szirmay Pulszky, H. Bolyai János életének és munkásságának lélektani értelmezése.** (The psychological significance of John Bolyai's life and work.) *Magyar Psychol. Szemle*, 1932, **5**, 86–104.—*D. Shakow* (Worcester State Hospital).

5602. **Tolman, E. C., & Horowitz, J. A reply to Mr. Koffka.** *Psychol. Bull.*, 1933, **30**, 459–465.—In reference to Koffka's criticism of *Purposive Behavior*.—*J. F. Dashiell* (North Carolina).

5603. **Valentiner, T. Kongressbericht. X. Internationaler Psychologenkongress in Kopenhagen.** (Report of the Tenth International Congress of Psychologists in Copenhagen.) *Zsch. f. angew. Psychol.*, 1933, **44**, 273–302.—In a general description of the congress the reporter deplores the fact that it was impossible to observe any unifying force or idea in the many papers (136) read at the Copenhagen meeting. He selects about 60 of these for brief abstracts, adding salient points here and there that were brought out in the discussions.—*K. F. Muenzinger* (Colorado).

5604. **Watson, D. L. Biological organization.** *Quar. Rev. Biol.*, 1931, **6**, 143–146.—This paper suggests physical measures of, and ways of accounting for, biological organization, based on an extension of the entropy concept, on the Maxwell demon mechanism, and on transition probability. The proposed thermodynamic treatment of organization is just as relevant for psychology as for biology. Of interest also to psychologists are the discussion of the subjective nature of probability and entropy, the concepts of "key action" and "selecting mechanism," and the demonstration that thought can effect a change in the generalized entropy.—*D. L. Watson* (Science Service).

5605. **Wenzl, A. Das Leib-Seele-Problem im Lichte der neueren Theorien der physischen und seelischen Wirklichkeit.** (The problem of body and mind in the light of new theories of physical and psychical reality.) Leipzig: F. Meiner, 1933. Pp. 104. RM 6.80.—This book considers the significance for the problem of body and mind of the relativity and quantum theories, of advances in normal and pathological physiology (action currents, etc.), of Gestalt theory, and of theories about the unconscious. Psychophysics, no less than physics, must be released from the principle of closed causality in nature. The most likely assumption is based upon a strict maintenance of the principle of energy conservation within the limits of a guiding or virtuality hypothesis. The four dimensional "world surface" must be thought of as distorted or deformed by psychical factors. The result is a reintroduction of a genuine time and simultaneity, although an objectively simultaneous reality cannot be demonstrated by any material observations. The author's theory unifies parallelism and reciprocity in the manner of viewing psychic reality, for the material constituents of the body and their relations are seen as psychical, and a reciprocal interaction between them and the centrally psychical is envisaged. Parallelism obtains between, on the one side, the essential relations of the elements and their metrical constellation, and, on the other, the virtual Gestalten and Gestalt processes as means, expression or symbol of the experiences and intentions of the mind.—*A. Wenzl* (Munich).

5606. **Wertheimer, M. Zu dem Problem der Unterscheidung von Einzelinhalt und Teil.** (On the problem of distinguishing between individual content and part.) *Zsch. f. Psychol.*, 1933, **129**, 353–357.—The varying value of individual content according to the whole of which it constitutes a part is illustrated by means of examples from topology and music.—*R. B. MacLeod* (Swarthmore).

5607. **West, C. J., & Hull, C. Doctorates conferred in the sciences by American universities, 1932–1933.** *Science*, 1933, **78**, 241.—In assembling data for the doctorates in the sciences conferred by American universities from year to year, the authors have observed a steady increase in the number granted, especially since 1919. The following figures summarize this trend: 1924, 611; 1925, 640; 1926, 748; 1927, 796; 1928, 842; 1929, 1025; 1930, 1074; 1931, 1147; 1932, 1241; 1933, 1343. The distribution of subjects showed no significant change last year as compared with earlier years. Of the 1343 doctorates granted in 1933, 101 were in psychology. The following figures show the number of doctorates granted by some of the larger universities for the year 1932–1933; Cornell, 110; Wisconsin, 87; Michigan, 81; Chicago, 73; Columbia, 71; Johns Hopkins, 68; Harvard, 63; Illinois, 63; California, 62; Minnesota, 62. Detailed data regarding the doctorates granted in 1932–1933 can be found in *Reprint and Circular Series of the National Research Council*, No. 105.—*H. W. Karn* (Clark).

[See also abstracts 5653, 5680, 5823, 5942, 5949.]

SENSATION AND PERCEPTION

5608. **Abe, S. Die Erscheinungsweisen der Zeitgestalten.** (The phenomenal modes of time configurations.) *Tohoku psychol. fol.*, 1933, **1**, 1–36.—Experiments conducted on 17 subjects to determine the possibilities in the patterning of perceptions of time.—*F. A. Geldard* (Virginia).

5609. **Bressler, J. Judgment in absolute units as a psychophysical method.** *Arch. of Psychol.*, 1933, No. 152. Pp. 68.—The task was to identify each comparison stimulus. Each value is given an appropriate name or characteristic label, and must be identified upon its presentation. The problem is subdivided (1) to compare the performance of the same observers in the method of constant stimuli and in the method of absolute units, (2) to study the dispersions of absolute unit responses to the individual stimuli, (3) to compare the results as determined by the Müller-Urban and the Spearman processes of treating the data, (4) to compare the dispersion measures of the responses to each stimulus and the measures of the heavier and lighter distributions as determined by the Spearman process. There were one female and four male observers. Two experiments were performed with lifted weights. There is a very close correspondence between the results calculated by the two mathematical processes (Müller-Urban and Spearman). The precision measures of the heavier and lighter distributions were appreciably smaller when judgments were made according to the absolute-units method. The differences between the precision measures of the equality-judgment distributions were, on the average, found to be entirely reliable and in favor of the absolute-units method. The reduction in the constant-error value in the method of absolute units is attributable in part to the absence of opportunity for the establishment of habitual responses. The method of absolute units may be too strenuous for some observers. 40 references are appended, as well as many tables presenting the original data.—*E. M. Achilles* (Columbia).

5610. **Collet, F. J. Etude statistique et étiologique sur l'anosmie.** (Statistical and etiological study on anosmia.) *J. belge de neur. et de psychiat.*, 1933, **33**, 439–448.—A résumé of observations on anosmic patients, the majority of which have been previously reported before the French Laryngological Society. The following subjects are considered: (1) anosmia of nasal origin; (2) traumatic anosmia; (3) anosmia in neural pathology.—*H. W. Karn* (Clark).

5611. **Dobson, M. Binocular vision and the modern treatment of squint.** London: Oxford Univ. Press, 1933. Pp. 107.—The author has assembled considerable practical information upon the modern research into orthoptic training. "Orthoptic training, which is the development of duction to combat a muscle imbalance, will often cure a squint without operation, and ought, at any rate, to be tried before operative treatment is undertaken." The text consists of the following chapters: (1) binocular vision, (2) binocular balance, (3) suspension of vision, (4) amblyopia, (5) the refractor and the dynamic retinoscope, (6) dynamic retinoscopy in cases of squint, (7) orthoptic training, (a) instruments used in orthoptic training, (b) stereograms, (c) training technique.—*R. J. Beitel, Jr.* (Clark).

5612. **Fraser-Harris, D. F. A simple method of appreciating the muscular sense.** *J. Physiol.*, 1932, **77**, 11P–12P.—*M. A. Rubin* (Clark).

5613. **Geiger, P. H., & Firestone, F. A. The estimation of fractional loudness.** *J. Acous. Soc. Amer.*, 1933, **5**, 25–30.—It is shown that judgments of fractional changes of loudness depend upon the intensity of the sounds and their frequency. A family of curves presents the correlation between reduction in loudness and decibels for three intensity levels at the same frequency. Also the judgments are influenced by the order of presentation of the stimuli and the loudness of the sounds before the test stimuli. The data are said to verify Fletcher's method of measuring auditory sensation.—*P. E. Huston* (Worcester State Hospital).

5614. **Gelb, A. Ein Beitrag zur Psychopathologie der Farbenwahrnehmung, auf Grund gemeinsamer Untersuchungen mit R. B. MacLeod.** (A contribution to the psychopathology of color perception, based on investigations made in collaboration with R. B. MacLeod.) *Zsch. f. Psychol.*, 1933, **129**, 271–281.—Experiments with advancing and retiring colors were made on a patient with a cerebellar lesion. The normal phenomenon was greatly exaggerated, and was accompanied by distortions of visual size and in some situations by the production of visual movement. The distortions disappeared when the patient adopted an every-day attitude, dealing with objects in a functional way rather than with colors as such.—*R. B. MacLeod* (Swarthmore).

5615. **Goldstein, K. Ueber Täuschungen des Tastsinnes unter pathologischen Umständen.** (Illusions of the touch sense under pathological conditions.) *Zsch. f. Psychol.*, 1933, **129**, 282–290.—Description of several illusions involving distortion of size and shape of tactually perceived objects, resulting (1) from brain injuries, and (2) from peripheral injuries.—*R. B. MacLeod* (Swarthmore).

5616. **Goodfellow, L. D. An empirical comparison of the various techniques used in the study of the localization of sound.** *J. Exper. Psychol.*, 1933, **16**, 598–603.—This investigation involved an attempt to determine the relative merit of the pointing technique, the diagram technique and the visible perimeter technique which have been used in the past in the study of the localization of sound. The results of the study are summarized as follows: (1) The visible perimeter technique proved to be 34% more accurate than the diagram technique, and 17% more accurate than the pointing technique. (2) In all positions except those 60° and 75° on either side of the median plane, the visible perimeter technique excelled both other techniques. In these positions, the pointing technique has as good and slightly better results. (3) The pointing technique was more accurate than the diagram technique, except in the front position and 10° to either side of the median plane. (4) Most subjects expressed a preference for the visible peri-

meter technique. (5) A tonal stimulus was consistently about 60% more difficult to locate than a noise stimulus. (6) Motivation had the greatest effect on the pointing technique, causing an improvement of 17%. (7) The greatest amount of improvement in learning took place with the visible perimeter technique and the least with the diagram technique.—*H. W. Karn* (Clark).

5617. **Granit, R. Isolation of the components in the retinal action potential of the decerebrate dark-adapted cat.** *J. Physiol.*, 1932, **76**, 1P–3P.—Three components of the response to stimulation with white light are isolated. It is found that the slow so-called c-wave of the composite potential is not homogeneous. Processes I and II are reversible. Process III is irreversible. Records from the optic nerve indicate that process II is the component chiefly responsible for the impulses. It is concluded that the three processes are the normal components of the action potential of an animal possessing very few cones.—*M. A. Rubin* (Clark).

5618. **Hartmann, G. W., & Triche, A. Differential susceptibility of children and adults to standard illusions.** *J. Genet. Psychol.*, 1933, **42**, 493–498.—Six standard visual illusions were presented to groups of primary and intermediate school children and to college students. To half the figures the children were the more susceptible; to half, the adult. None of the differences between children and adults were reliable; and no common characteristics were found in the figures that were more illusory in either case such as would be expected if children's figural positions are really more independent of absolute position, as sometimes maintained.—*J. F. Dashiell* (North Carolina).

5619. **Jacobs, M. H. Über den Einfluss des phänomenalen Abstandes auf die Unterschiedsschwelle für Helligkeiten.** (On the influence of the phenomenal distance on the differential threshold for brightnesses.) *Psychol. Forsch.*, 1933, **18**, 98–142.—The problem investigated is to see whether the differential threshold for brightnesses depends on the phenomenal distance between two stimuli, or on the distance on the retinal surface, or on both. The distances on the retinal surface and the phenomenal distances had to be varied independently of one another. It was found that if one takes care to stimulate identical functional points on the retina, the differential threshold increases with the distance. Also if the distances on the external retinal surface remain constant and only the phenomenal distances are varied by the proportional variation of the observational distance, the threshold is increased with the increase of the distance, either in the dark or in the light. If one varies the retinal distance with the phenomenal distance while keeping the observational distance constant, the effect of the phenomenal distance is only strengthened a little in the light; in the dark complications arise from the ring-form of the most sensitive zone to light. The differential threshold remains the same when the objective distances are changed, but not the (retinal and) phenomenal. Even when the distance is lacking on the retinal surface, namely when the comparison fields lie one behind the other, the differential threshold increases with increasing distance between the comparison fields. Although the thresholds vary with the phenomenal distances, the conclusion was drawn that there was no certainty that the influence on the threshold found arose only from the variation of the phenomenal distance, since not all variables could be held constant.—*J. F. Brown* (Kansas).

5620. **Leister, F. Zeitschätzungen an disparaten Reizen.** (The estimation of the temporal duration of disparate stimuli.) *Arch. f. d. ges. Psychol.*, 1933, **88**, 257–300.—The problem of the present experiment was to determine the estimation of the duration of stimuli of the same and of different modalities. Stimuli were tones and lights; in some series a tone was presented, followed by a light, while in others the reverse was the case. In some cases the tone was followed by another tone, or the light by another light. In some series the tone and light came from unequal distances. In one group of experiments O was required to emphasize subjectively one or another of the stimuli, by paying particular attention to it. The pauses between the stimuli were 2 sec., 1 sec., and none. The results show that optical temporal durations are considerably under-estimated as compared to acoustical durations. Judgments were more precise when both stimuli were of the same modality. When the duration of the pause between stimuli was decreased, O's were found to belong to two groups; the one group paid no attention to the difference, while the other group was disconcerted by it. Subjectively emphasized stimuli appeared subjectively of longer duration.—*D. E. Johannsen* (Skidmore).

5621. **Lifshitz, S. Two integral laws of sound perception relating loudness and apparent duration of sound impulses.** *J. Acous. Soc. Amer.*, 1933, **5**, 31–33.—It is shown experimentally that the ear integrates sound intensity through a definite time interval, so that loudness is determined by the integral $\log \int_{t_1}^{t_2} I\,dt$, where I = sound intensity in terms of the threshold of audibility, and t = time; further, that apparent duration of a sound impulse depends upon its loudness, $\int_{t_1}^{t_2} \log I\,dt$.—*P. E. Huston* (Worcester State Hospital).

5622. **Luckiesh, M., & Moss, F. K. A correlation between illumination intensity and nervous muscular tension resulting from visual effort.** *J. Exper. Psychol.*, 1933, **16**, 540–555.—The purpose of this experiment was to determine the correlation between intensity of illumination and human energy losses incident to reading. Intensity of illumination was selected as the experimental variable and all extraneous factors eliminated or reduced to a minimum. Tests were conducted at each of three intensities of illumination—1, 10 and 100 foot-candles, respectively. Variations in muscular strain were determined by measuring the changes in muscular tension as registered by the fingers of the left hand, which rested naturally and lightly upon the knob of a concealed

key. An analysis of the results revealed that the indicated nervous muscular tension, developed in reading, decreased from 63.2 grams to 43.0 grams as the intensity of illumination was increased from 1 to 100 foot-candles.—*H. W. Karn* (Clark).

5623. **Mayou, M. S. The retinal visual cells in man and fresh-water fish.** *Brit. J. Ophth.*, 1933, **17**, 477–490.—In this paper the author has drawn attention to the physical side of the formation of the rods and cones, which are not differentiated in fish as they are in man. Many illustrations (microscopic sections) are presented. The paper deals with: (1) the microscopic anatomy and histology of the visual cells, (2) comparison of the visual cells of fish with man, (3) the movement of the visual cells, (4) development. The points which the author has brought out in this paper are: (1) the value of Mallory's differential connective-tissue stain for examining the retina; (2) the histology of the visual cells in pike, dace, roach and trout; (3) the absence of true comparison between the rods and cones in the lower animals and man; (4) the fact that the rods and cones in the human subject are phylogenetically developed from the myoid and ellipsoid in the lower animals; (5) the fact that the packing together of the visual elements plays a great part in changing the shape of the visual cells. —*R. J. Beitel, Jr.* (Clark).

5624. **McGilvary, E. B. Perceptual and memory perspectives.** *J. Phil.*, 1933, **30**, 309–330.—This discussion treats perceptual and memory experiences as perspectives. Projective geometry provides instances of relational complexes conditioned by such factors as distance, direction, shape, etc. So does perspective drawing. Similarly in monocular vision, the perspective shape is the shape of the object from that point of view. There is here no problem of the sensa, since it is assumed as a postulate that "the seen spatial characters of the object in monocular perspectives are physical characters that belong to physical objects." They belong, however, not absolutely, but relative to the physical conditions. In binocular vision we have physiological perspectives. Here the qualities, such as depth, are functions of a system which includes the organism. The word function is used in a sense analogous to mathematical function. Colors and other secondary qualities may also be treated as perspective characters which vary with position, distance, light, etc. Since the objects receive no energy from the observer they may be regarded as functions in the foregoing sense. The "thing" is the entireness of all its relational characters, including its place and date. Memory images may also be treated as perspectives of objects with characteristic differences from perceptual perspectives.—*E. T. Mitchell* (Texas).

5625. **Merry, R. V., & Merry, F. K. The tactual recognition of embossed pictures by blind children.** *J. Appl. Psychol.*, 1933, **17**, 148–163.—The ability of blind children to recognize tactually simple embossed designs and pictures is very limited. After a period of training there is significant improvement in ability to recognize designs (circle, square, cross, triangle, and star).—*R. S. Schultz* (Psychological Corporation).

5626. **Nyssen, R. Les réflexes olfactifs et leur valeur sémiologique.** (The olfactory reflexes and their semiological value.) *J. belge de neur. et de psychiat.*, 1933, **33**, 411–421.—A résumé of observations and conclusions resulting from the study of anosmic subjects with regard to the semiological value of olfactory reflexes in the investigation of disturbances of olfactory excitability.—*H. W. Karn* (Clark).

5627. **Ortmann, O. Theories of synesthesia in the light of a case of color hearing.** *Human Biol.*, 1933, **5**, 155–211.—The author points out difficulties in nomenclature in the literature of synesthesia, and then analyzes the advantages and disadvantages of the various theories: association, degeneracy, compensation, psychoanalytic, vibration, and emotional-tone. These are interpreted in the light of the data secured for the individual case discussed in detail later. On account of the inadequacy of the theories mentioned, the author advances a sensation-form theory (based on his theory described in the *Journal of Comparative Psychology*, Vol. 11, No. 3) in explanation of certain attributes common to the sensations involved in synesthesia. The phenomenon itself he founds upon a sensory-reflex basis which is analyzed in detail. At the same time the need for allowing for the functioning of association (divided into intrinsic and extrinsic) is pointed out. The original contribution of this study is a detailed description of a pronounced case of color hearing, the observation of which extended over a period of ten years. The manner in which these observations were made and their comprehensiveness has enabled the author to carry the analysis of synesthesia a step farther than was possible with previous data. The photisms of the case studied are listed under such subjects as fusion, association, age, localization, order, sensory superposition, imagery and quality. Various original illustrations of the photisms, with several in color, are given. Among the conclusions reached are: the atypical nature of synesthesia; its definite variation with the individual case; its differentiation from mere association; its correlation with general intelligence, sensitivity, and imagery; its deterioration with age; and its variation from normal sensory stimulation. The study was made at the Research Department of the Peabody Conservatory of Music. An extensive bibliography (159 works) is appended.—*O. Ortmann* (Peabody Conservatory).

5628. **Pauli, R. Die Erforschung der Haut- und Muskelempfindungen. Max v. Frey zum Gedächtnis.** (The investigation of the skin and muscle sensations. In memory of Max v. Frey.) *Arch. f. d. ges. Psychol.*, 1933, **88**, 231–252.—The author summarizes Von Frey's chief experimental results, and states his conclusions respecting the skin and muscle receptors. As Von Frey's chief contributions to the psychology of touch sensations, Pauli suggests: (1) analysis of the pressure and pain senses; (2) clarifying of the problem of muscle sensitivity by the differentiation of the muscle-tension from the muscle-lengthening senses; (3) development of an adequate physiological

theory; (4) development of an adequate experimental technique; (5) his general point of view, which links psychology and anatomy. The author concludes that Von Frey's name should be included with those of Weber, Hering, and Von Kries as the classicists of physiological psychology. Bibliography and biographical notes.—*D. E. Johannsen* (Skidmore).

5629. **Pauli, R. Ueber den experimentellen Nachweis der Enge der Bewusstseins.** (The experimental demonstration of the narrowness of consciousness.) *Zsch. f. Biol.*, 1931, **92**, 37–44.—After a survey of the problem and its contradictory solutions, the author presents his experiments, in which the task set was to judge two impressions, each lasting a tenth of a second, applied one visually, the other tactually, practically simultaneously. This judgment was to be expressed by an adapted reaction, an optical task being to detect errors in printed words and a tactile task being to compare intensities of stimulation. The reaction times were from 0.7 sec. for the tactile task, whether alone or accompanied, to 1.4 sec. for the optical task alone, but 2.5 sec. when accompanied by the tactile task; the lengthening was thus greater than the duration of the tactile reaction alone. Thus it is necessary to pass from one task to the other; the two cannot be accomplished simultaneously, on account of the limitation of the field of consciousness.—*M. G. Willoughby* (Clark).

5630. **Peters, W. Versuche über den Einfluss der Form auf die Wahrnehmung der Flächengrösse.** (Experiments on the influence of form on the perception of the size of surfaces.) *Zsch. f. Psychol.*, 1933, **129**, 323–337.—Four children were presented with surface figures equivalent in area but differing in form, and were instructed to compare them as to size. In general such figures as the star, the ellipse, and the triangle were judged largest, and such as the square, the rectangle, and the circle were judged smallest. It was concluded that sharp angles and great linear distances between corner points tend to enhance apparent size. The series was not simple and unambiguous, however, and striking individual differences were found.—*R. B. MacLeod* (Swarthmore).

5631. **Rudeanu, A. Les temps de réaction visuels en fonction de quelques contrastes.** (Visual reaction time as a function of certain contrasts.) *Trav. humain*, 1933, **1**, 192–203.—The subject reacted to the motion of the chronoscope hand. This hand was black and the dial behind it either black or white. Two systems of illumination were used, one giving about five times the intensity of the other at the dial. Each of four subjects gave 500 reactions under each condition. With the black dial there was a marked slowing of reaction time and increase in variability when the weaker illumination was used. With the white dial the change in illumination caused rather small differences in speed or variability. The black dial is consistently inferior to the white dial and this inferiority is much more marked with the lower illumination.—*H. E. Burtt* (Ohio State).

5632. **Schaefer, H. Ueber rhythmische optische Erscheinungen und ihre individuellen Eigentümlichkeiten.** (The rhythmic optical processes and their individual characteristics.) *Zsch. f. Sinnesphysiol.*, 1931, **62**, 1–37.—22 subjects were measured for consecutive images presenting known alternation, for opposed appearances of reversible perspective with Necker's cube, and for the predominance of one or another field in the conflict of antagonistic images in stereoscopic vision. The data show that the action of the will, as well as of fatigue and the emotions, is exercised on the rhythms of these periodic processes, at least the last two, the alternation of the consecutive images subtracted from the voluntary influence being only accelerated by fatigue. Invariable individual types show up in the two characteristics of proper duration of the period and relation of the phases; the types are distinguished according to the extreme degrees of stability of the two characteristics. The theoretical considerations invoke the play of reciprocal inhibitions approaching the reciprocal innervations; this play of inhibitions is exercised at the higher levels, the cortical level corresponding to the psychological process. The alternation of reversible perspectives, more strongly influenced by representations, corresponds to the higher level. Here the rhythm is more slow; it increases at the higher levels.—*M. G. Willoughby* (Clark).

5633. **Takano, K. Contrast of sound. I.** *Tohoku Psychol. Fol.*, 1933, **1**, 53–70.—A series of experiments in which two tones are sounded together yield results which make possible a tentative set of "laws of tonal contrast." The contrast effect is manifested in a pitch (brightness) change and is dependent upon the relative intensities of the tones and upon their tonal distances. Contrast is greatest when a high tone is added to a lower. No bibliography, but a brief "history of opinion about tonal contrast."—*F. A. Geldard* (Virginia).

5634. **Temkine, W. Contribution à l'étude du facteur professionnel dans l'étiologie de certains cas de surdité.** (A contribution to the study of the professional factor in the etiology of certain cases of deafness.) *Acta otolar.*, 1933, **19**, 13–22.—The number of professions included in the list of those to receive Russian government insurance for deafness resulting from their work is very incomplete, according to the author. A case of sudden deafness in a professional musician is discussed. After five years of intensive treatment by experts in both Russia and Germany his condition was unimproved. The conclusions were that his trouble lay in the nerve trunk. A predisposition to such trouble could be attributed either to infectious diseases in childhood or to his musical career, which included playing a wind instrument and directing an orchestra. Most authorities agreed that this was a professional deafness, although musicians are not among those eligible for government insurance in Russia.—*M. B. Mitchell* (New Hampshire State Hospital).

5635. **Torrey, T. W. The relation of taste-buds to their nerve fibers.** *Proc. Nat. Acad. Sci.*, 1931, **17**, 591–594.—Upon section of the glossopharyngeal nerve, the taste-buds degenerate when their nerve

fibers are degenerated, and regenerate when their nerve fibers have regenerated. Olmsted attributes this relation to the influence of a chemical substance which is carried to the sensory cells by the nerve fibers and which is necessary to the integrity of the former. Using the catfish, the author, under the direction of Parker, found that the taste-buds of the barbels disappeared in 11 days at 20° and in 20 days at 10° after section of the 7th pair of nerves. The process is quite abrupt: the taste-buds are still normal on the eve of their disappearance, which takes place when the disintegration of myelin reaches the sensory apparatus. The apparatus regenerates centrifugally. It seems legitimate to think of a substance which has its origin in the nuclear region of the neuron, is slowly transported in the fiber, and maintains the integrity of the fiber and of the sense-cell to which it leads. In fact, if a total ablation of the nerve is performed, which deprives the sense-cell completely of connection with this substance, the degeneration of the taste-buds takes place within 24 hours.—*E. H. Kemp* (Clark).

5636. **Van der Horst, L., & Van Essen, J. Ueber eine neue Methode zur Messung der Wahrnehmungszeit.** (A new method of measuring perception time.) *Arch. f. d. ges. Psychol.*, 1933, **87**, 287–298.—To measure the time between physical stimulation of the retina and perception of the stimulus object the following apparatus was used. A frosted glass plate 8 x 40 cm. was faintly illuminated in a dark room. Upon this plate, presented lengthwise, was a scale of vertical lines numbered 1–6 in each direction outward from the center. A shadow was caused to close in symmetrically toward this center from both ends of the plate. At some point near the center the light, not yet extinguished by the converging shadows, was suddenly increased in intensity. The subject was asked to say where, on the scale, the shadows' inner edges were when this occurred. They invariably named a point slightly closer to the center than that actually occupied by the shadows when the increase of illumination had occurred. The 52 subjects were chiefly untrained in psychological observation. The children's perception time was 0.106 sec.; adolescents (14–21 years), 0.077 sec.; adults under 50, around 0.045 sec.; older people, 0.077 sec. Shorter times were recorded for men than women; also for more intellectual rather than less intellectual subjects.—*W. D. Ellis* (Mass. State College).

5637. **Washburn, M. F. Retinal rivalry as a neglected factor in stereoscopic vision.** *Proc. Nat. Acad. Sci.*, 1933, **19**, 773–777.—"If we draw on each side of a stereoscopic slide a pattern which combines the right eye and left eye views of the object, there is no reason why, if solidity depends on a combined retinal pattern, such a slide should not in the stereoscope give solidity to the object." This is not the case. "It follows that the stereoscopic perception of solidity is not derived from a retinal pattern composed of two images of an object obtained from different points of view." The author reports an experiment which demonstrates a result she finds reported nowhere else in the literature, namely that rivalry occurs in connection with ordinary vision of solid objects. The author states, "No one so far as I can find has hitherto suggested that retinal rivalry plays an important part in the perception of solidity, but from the evidence presented in this paper such a conclusion seems probable."—*W. N. Hallett* (Cedar Crest).

5638. **Waterston, D. Observations on sensation. The sensory functions of the skin for touch and pain.** *J. Physiol.*, 1933, **77**, 251–258.—The author puts forth the theory that the nerves of the epithelium are the nerves of light tactile sensation, and that they do not under ordinary conditions convey impulses which give rise to pain. The corium is the seat of pain sensations. On the basis of this theory it is necessary to abandon the views that nerve fibers of the epithelium subserve the sensation of pain, and that the Pacinian bodies or Meissner corpuscles are receptors for light touch. The conclusions reached by the writer are in harmony with the view that alterations in the frequency of impulses in afferent nerve fibers modify the intensity, but have no influence whatever on the quality of the sensation, and confirm and amplify the conclusion reached by Adrian in which he states that in frogs and guinea pigs the larger medullated fibers supply the touch receptors, and at least in some of these fibers no messages can give rise to pain in the normal animal.—*M. A. Rubin* (Clark).

5639. **Wilbrand, H. Ueber die wissenschaftliche Bedeutung der Kongruenz und Inkongruenz der Gesichtsfelddefekte.** (On the scientific importance of congruence and incongruence of defects of the visual field.) *J. f. Psychol. u. Neur.*, 1930, **40**, 133–146.—The majority of the visual fields described in the literature have been determined with test objects of five square millimeters, which size is sufficient only for clinical purposes. In order to make certain of macular conservation and its congruence, which task requires precise determination of lines of separation, it is necessary to obtain fixation by the subject of a point and to present to him the smallest white object possible. The author proposes this hypothesis in explanation of macular conservation and representation: each cone is related to two ganglion cells, of which one sends its axon to the centers of the same side and the other, by way of the chiasma, to the centers of the opposite side.—*E. H. Kemp* (Clark).

5640. **Wittmaack, K. Über die Wege der Knochenleitung mit besonderer Berücksichtigung der Schallschädigung durch Knochenleitung.** (The course of bone conduction with special consideration of the loss of sound through bone conduction.) *Acta otolar.*, 1933, **91**, 105–126.—*M. B. Mitchell* (New Hampshire State Hospital).

5641. **Wolf, W. Über kontrasterregende Wirkung der transformierten Farben.** (On the contrast producing effect of transformed colors.) *Psychol. Forsch.*, 1933, **18**, 90–97.—Kravkov and Paulsen-Baschmakowa investigated this problem for color contrast, and Katz investigated it for brightness contrast. All of them came to the same conclusion: The contrast induction is not determined by the

subjective (phenomenal), but by the reduced given characteristic of the color. The writer attempts to investigate whether the contrast appears at all under the spatial conditions which were present in the experiments of the above authors. He criticizes them for not stating whether the two contrast fields were seen in front of the different illuminated spaces, i.e. outside the same, or whether they were localized within these spaces. The apparatus consisted of two boxes lined with gray paper. The critical fields were colored papers suspended 25 cm. in front of the openings of the boxes. Neutral and colored illumination were used. The results explain why the difference in the two critical fields studied by Katz and the others did not appear, since the spatial conditions for the appearance of contrast are not given.—*J. F. Brown* (Kansas).

5642. **Zeise, L. Die Entwicklung und Bedeutung des Zeitproblems in der modernen Psychologie.** (The development and meaning of the problem of time in modern psychology.) *Arch. f. d. ges. Psychol.*, 1933, **88**, 201–230.—The author discusses the concept of time as a conscious process from an historical point of view, indicating the difficulties involved, and showing how temporal and spatial concepts have been confused.—*D. E. Johannsen* (Skidmore).

5643. **Ziehen, T. Historische und nicht-historische Bemerkungen zu einigen Fragestellungen der psychologischen und erkenntnistheoretischen Raumtheorien.** (Historical and non-historical comments on a few of the problems of psychological and epistemological theories of space.) *Zsch. f. Psychol.*, 1933, **129**, 358–368.—A sketch of the requirements of an adequate theory of space, and an indication of a possible empiristic solution.—*R. B. MacLeod* (Swarthmore).

[See also abstracts 5574, 5577, 5581, 5582, 5592, 5597, 5656, 5672, 5675, 5689, 5752, 5757, 5770, 5866, 5891, 5924, 6009, 6036.]

FEELING AND EMOTION

5644. **Chiba, T. Ueber das "Muki"-Gefühl.** (Concerning the feeling of "indifference.") *Tohoku Psychol. Fol.*, 1933, **1**, 37–52.—The feeling of "indifference" or "neutrality" (*muki*, borrowed from Buddhism = neither good nor bad), is a definite state out of which arise feelings of pleasantness and unpleasantness.—*F. A. Geldard* (Virginia).

5645. **Heinze, H. Zur Phänomenologie des Gemüts. Charakterologische Untersuchungen an Kindern.** (On the phenomenology of feelings. Characterological studies of children.) *Zsch. f. Kinderforsch.*, 1932, **40**, 371–456.—The feelings constitute a special aspect of the psyche; they comprise an essential part of character study, since individual differences with respect to feelings are very marked. It is the feelings which constitute one's personality "for others." Feelings cannot be correlated with intelligence. A characterological inquiry is reported in which native poverty of feeling is distinguished from cases where dulled sensibilities have resulted from environmental conditions. The importance of this distinction for pedagogy is emphasized.—*H. Heinze* (Leipzig).

5646. **Ivy, A. C. The effect of worry on digestion.** *Scient. Mo.*, 1933, **37**, 266–269.—Deaths from gastric ulcer have increased 25% among white men since the start of the depression in 1929.—*J. F. Dashiell* (North Carolina).

5647. **Marucci, A. Le passioni nella filosofia e nell' arte.** (The passions in philosophy and art.) Torino: Fratelli Bocca, 1932. Pp. xviii + 176.—The object of this work is pedagogic and expository. The author presents passion on one hand as a pathological state, on the other as a law of life, a natural fact, an inescapable drive in human conduct. Pain, which is the essence of the passional process, is considered the discriminating principle in the classification of the passions, which can be egoistic, ego-altruistic, or altruistic, according as the individual suffers for himself, for himself and others, or only for others. All apathetic, phlegmatic, passionate subjects can have passions of 3 types. The passions to which the author devotes special chapters are love, the passion for glory and country, and the passions of the people. Education, and especially self-education, can exercise a prophylaxis on passions; for the therapeutics of passion it is especially necessary to prevent it from being repeatedly satisfied. In any case self-control can be obtained only by the education of the will, contrary to that which intellectualist pedagogy holds. —*R. Calabresi* (Rome).

5648. **Poulson, M., & Nielsen, B. Certain color preferences of college students.** *Trans. Utah Acad. Sci.*, 1933, **10**, 87–88.—This experiment was carried out because the authors believed that previous investigators in this field had tended to over-simplify the experimental findings and to introduce unjustified assumptions in their attempts to put these into practical use. "An important error, we thought, was to fail to recognize that because a certain red or a certain blue or a certain green had such and such a preference rating that it would be correct to generalize that the many different reds, blues, etc., would have the same preference rating as the particular red, blue, etc., that had been studied." 300 young men and 300 young women acted as subjects. About a dozen different colors with 2 or 3 different reds, blues and yellows were to be arranged according to preference. An analysis of the results leads to the following conclusion: "A true statement of color preference cannot be made for blue or yellow or red or in fact any color in general without specifying the certain color which is preferred over another certain color or group of certain colors. In our study certain interesting color preferences and sex differences and similarities were found." —*H. W. Karn* (Clark).

ATTENTION, MEMORY AND THOUGHT

5649. **Abdun-Nur, E. A. Mental work: certain of its characteristics.** *J. Genet. Psychol.*, 1933, **42**, 483–490.—The amount of work done in each successive 2-minute period of a total sitting of about an hour on

addition problems by seventh- and eighth-grade children was analyzed as to accuracy and amount. Spurts and a rest effect were noted.—*J. F. Dashiell* (North Carolina).

5650. **Brown, J. F. Über die dynamischen Eigenschaften der Realitäts- und Irrealitätsschichten. Untersuchungen zur Handlungs- und Affektpsychologie XIV. Herausgegeben von K. Lewin.** (On the dynamic properties of the levels of reality and unreality. Studies of action and affect psychology XIV. Edited by K. Lewin.) *Psychol. Forsch.*, 1933, **18**, 2–26.—In psychology one must not, as in epistemology, speak only of reality and unreality, but there are degrees of reality which can be ascribed generally to psychic processes. The differences in degrees of reality form a special dimension. The purpose of this investigation was to study the fluidity of the psychic levels of reality and unreality in their dynamic effects. The differences of degree of reality rest on the social importance of problems given to subjects. These problems were given as a mental test, and consisted of tasks similar to those used in mental testing. Other problems were given which were stated to have no importance. Different groups of subjects were tested after 5 min., 30 min., 36 hours, and 1 week to see how many problems they remembered. It was found that acts of a higher degree of reality are retained better over a period of time than acts of a lower degree of reality. With an increased time interval after the test the values for the retained unreal acts decrease rapidly. The number of retained acts of a high degree of reality remain up to a week about the same. Later the degree of reality for both groups of acts was changed. The memory test after a week showed that the acts considered real were retained better. The more unreal levels are dynamically more fluid than the more real levels.—*J. F. Brown* (Kansas).

5651. **Liebers, —. Zeugenaussagen bei Verkehrsunfallen.** (Testimony in traffic accident cases.) *Arch. f. Krim.*, 1933, **93**, 40–43.—Important considerations in the evaluation of testimony are: Was the witness's position such that he could actually have made his observations? Does his testimony represent observation or only inference? Injuries may become apparent only after an interval; hence delayed claims for damages are not necessarily fraudulent. Children familiar with traffic conditions are often good observers. Estimations of speed and distance are notoriously difficult, and observations covering a short distance are unreliable. Whether the witness is himself a driver or not gives decisive weight to his statements. In case of conflicting evidence, one must determine which side had the better capacity and possibility for observation. Photographs are valuable for supplementing verbal testimony.—*M. E. Morse* (Catonsville, Md.)

5652. **Lippmann, O. Methoden der Aussagepsychologie.** (Psychological methods in evaluation of testimony.) In *Abderhaldens Handb. d. biol. Arbeitsmeth.*, VI, C, II, 4. Wien-Berlin: Urban & Schwarzenberg, 1933. Pp. 1111. Rm. 8.—Lippmann gives a comprehensive methodology of the problem of testimony and its forensic application. The decisive question-complexes are: How do the objective conditions in regard to a deposition (the kind of situation, conditions of experience, lapse of time, etc.) affect its extent and reliability? What effect have the witness's personality and attitude on his deposition? What characteristics show that a certain content of the witness's memory corresponds to the objective situation? The methods are given in detail. F. Baumgarten contributes a section on the value of the test-method in general, and Wertheimer one on the present status of diagnosis. Extensive bibliography. —*P. Plaut* (Berlin).

5653. **Lowell, H. T. Explanation.** *Aust. J. Psychol.*, 1931, **9**, 214–221.—A rapid survey of the different methods of explanation of facts—by governing laws, by causes, by classes, and by comparative values; the principal part of the article deals with explanation in terms of ends. Several theories are examined, leading to the conclusion that the scientist does not explain at all, but describes in a more and more adequate fashion; for him explanation is only a hope or a possibility.—*M. G. Willoughby* (Clark).

5654. **Smoke, K. L. Negative instances in concept learning.** *J. Exper. Psychol.*, 1933, **16**, 583–588.—The purpose of this experiment was to investigate the relative merits of concept learning from (1) positive instances only, and (2) both positive and negative instances, when simultaneous presentation of the learning material is employed. Six concepts were used. Each concept concerned a certain type of geometrical design. Results showed that there is no statistically significant difference in the time required for learning concepts from both positive and negative instances as compared with learning from positive instances only. Most of the subjects, however, did prefer to learn from both positive and negative instances. Evidence was also obtained which revealed a tendency for negative instances to discourage "snap judgments." The author concludes as follows: "Although negative instances may not make for rapidity in learning they tend to make for accuracy, especially in the case of difficult concepts. It appears that in so far as negative instances assist concept learning they do so largely because of the way in which they prevent the learner from coming to one or more erroneous conclusions while he is still in the midst of the learning process."—*H. W. Karn* (Clark).

5655. **Sosset, M. Recherches sur les troubles de la mémoire (suite).** (Research on defects of memory. Continued.) *Ann. méd.-psychol.*, 1933, **91**, 129–172.—The different forms of memory are discussed: immediate memory as distinguished from recall, recognition memory, and associative memory. Immediate memory, such as memory for digits just heard, may be more sensorial than memorial. Ability to recall is not entirely dependent on attention, for in imbeciles it is sometimes better than their attention. Recognition memory involves the integration of the memory with the ego. Associative memory is sometimes retained after all other forms of memory have disintegrated. It does not always correlate with

intelligence. Sometimes the patient, such as an imbecile, will score much higher on the associative memory test than on the intelligence tests. Demented patients may also give associative memories more or less automatically. Memory and intelligence, as well as attention and memory, seem to vary independently. Memories have to mature; first they are sensations, then with time they become fixed as real memories, which may or may not be recalled. Memory defects of one kind or another are present in most cases of psychopathology and are often the first or only mental symptom.—*M. B. Mitchell* (New Hampshire State Hospital).

5656. **Targonski, H. [Contribution to the monograph on Lahy's test of diffused attention.]** *Psikhotechn.*, 1931, **5**, 24–32.—Description of the instructions for and technique of Lahy's synthetic test (with visual and auditory stimuli); and of its application to more than 700 subjects. The results are given in deciles for the errors, the number of stimuli, the precision of the work, the average reaction time with the regulator, the inhibition and the release. It is clear that aptitude in the test diminishes with age in so far as it concerns the margin of apprenticeship, the precision of work and the rapidity of motor reactions.—*M. G. Willoughby* (Clark).

5657. **Van Ormer, E. B. Sleep and retention.** *Psychol. Bull.*, 1933, **30**, 415–439.—A critical review of 31 titles leads to several conclusions, including the following: a sleep of about 8 hours definitely favors retention of nonsense material, though one of shorter intervals less certainly does so; which fact accounts for some well-known features of retention curves. If found also to hold for other verbal material, the conclusion will have great theoretical consequences, which are pointed out.—*J. F. Dashiell* (North Carolina).

[See also abstracts 5624, 5723, 5787, 5794, 5810, 5929, 6041.]

NERVOUS SYSTEM

5658. **Altenburger, H., & Kroll, F. W. Die parasympathische Beeinflussung des neuromuskulären Apparates.** (Parasympathetic influence upon the neuromuscular system.) *Pflüg. Arch. f. d. ges. Physiol.*, 1932, **230**, 349–355.—"Stimulation of the distal and of a sectioned dorsal root results in a change in the chronaxy of the corresponding neuromuscular mechanism, shortening it in the intact organism and lengthening it in the decerebrate. A reversal of the effect of stimulation similar to that following decerebration may also be observed if extirpation of the homolateral sympathetic nerve precedes the dorsal root stimulation."—*B. F. Skinner* (Harvard).

5659. **Beresina, M. The resting heat production of nerve.** *J. Physiol.*, 1932, **76**, 170–181.—From studies of resting heat production of frog's nerve in oxygen and during oxygen lack, it is found that the resting heat rate in oxygen corresponds to the oxygen consumption measured by other observers, and the minimum resting heat rate in nitrogen to the lactic acid formation observed by Gerard and Myerhof. The smallness of the recovery heat after asphyxia agrees with Fenn's observation of the smallness of the recovery oxygen under the same conditions.—*M. A. Rubin* (Clark).

5660. **Beresina, M., & Feng, T. P. The heat production of crustacean nerve.** *J. Physiol.*, 1933, **77**, 111–139.—The heat production of crab's limb nerve is more fully investigated than in Hill's original work on the subject. The course of the heat production of fresh crustacean nerve in nitrogen is exactly the same as in oxygen. While stimulated even at frequencies only about a quarter or so of the maximum to which it will respond, crab's nerve is shown to be very fatigable, but it can maintain prolonged activity if the frequency of stimulation is very low. The resting heat production of crab's nerve in oxygen at 20.7° C. found by the authors agrees satisfactorily with the oxygen consumption measurement of Myerhof and Schulz.—*M. A. Rubin* (Clark).

5661. **Bhatia, B. B., & Burn, J. H. Action of ether on the sympathetic system.** *J. Physiol.*, 1933, **77**, 30P–31P.—It is concluded that ether causes a discharge of impulses along all sympathetic nerves.—*M. A. Rubin* (Clark).

5662. **Boynton, E. P., & Hines, M. On the question of threshold in stimulation of the motor cortex.** *Amer. J. Physiol.*, 1933, **106**, 175–182.—"By use of graded stimuli and known frequencies, single points within the motor cortex of the cat and of young macaques demonstrated the deviation, reversal of response and facilitation of Sherrington as well as a reciprocal of facilitation, 'centripetal individuation.' Movements elicited by frequencies of 30 cycles or less generally showed a prolonged latent period and slowing of time to attain the maximal contraction. Stimulation of motor cortex of the year-old macaque with frequencies below 20 cycles did not reproduce the movement characteristic of the cortical point in question; rather, fractional parts of the movement appeared. This phenomenon was not noted in the cat's motor cortex, from which movement was elicited at these lower frequencies. Although the strength of current necessary to reproduce any specified movement might be increased above 500 cycles, the movement was not fractional, if the threshold was reached. At these higher frequencies the latent period was increased but the character of the movement did not change."—*C. Landis* (N. Y. Psychiatric Institute).

5663. **Cannon, W. B. Chemical mediators of autonomic nerve impulses.** *Science*, 1933, **78**, 43–48.—Following a brief review of what is known regarding autonomic nerve endings, the author takes up the evidence gathered since 1921 for the presence of chemical mediators of autonomic nerve impulses, and the nature of these substances is described. Despite the resemblances of the substance derived from smooth and cardiac muscle when affected by sympathetic impulses to adrenin, Cannon and Bacq suggest the special name "sympathin." Recent experimentation by Cannon and Rosenblueth indicates not only that sympathin is different from adrenin, but that there

are two kinds of sympathin. The evidence for these conclusions is cited. Argument is advanced for the origin of the substance in the muscle cells rather than as a secretion of the nerve terminals as held by Parker. Modification of ideas of pharmacological action as the result of knowledge of the role of chemical mediators of nerve impulses is discussed.—*P. Seckler* (Radcliffe).

5664. **Coghill, G. E. The neuro-embryological study of behavior.** *Science*, 1933, **78**, 131–138.—Following a survey of the history of the subject, three principles on the neurological side of the problem are discussed: first, the primacy of a motor mechanism of total integration; second, the development of mechanisms of partial integration through localized acceleration of growth, raising the point of equipotentiality; third, progressive organization of the nervous system from the whole to the part. Using *Amblystoma* as illustration, each principle is discussed, experimental work and results being cited. The relation of these neuro-embryological principles to behavior is then considered. The writer believes that behavior as well as neuro-embryological growth develops in the organism by the expansion of a primarily integrated total pattern of action and the individuation of partial patterns within the total pattern. The view that the processes of integration of the whole and individuation of parts are antagonistic to each other in the development of behavior is presented. In closing, the necessity of considering structure *in* function as a space-time relation, rather than structure as static and in a causal relationship with function, is presented as an aim of this type of study.—*P. Seckler* (Radcliffe).

5665. **Cooper, S., & Sherrington, C. S. Degeneration of peripheral nerves after spinal transection in the monkey.** *J. Physiol.*, 1933, **77**, 18P–19P.—The authors infer from their experiments that some traumatic damage is likely to supervene in the sciatic nerve in the monkey in a paraplegic state, although the animal be provided with soft hay bedding in a roomy cage.—*M. A. Rubin* (Clark).

5666. **Cushing, H. Concerning a possible "parasympathetic center" in the diencephalon.** *Proc. Nat. Acad. Sci.*, 1931, **17**, 253–264.—In a series of notes the author has shown that the ventricular injection of pituitrin or pilocarpine has a stimulatory effect, which is prevented by a previous subcutaneous or ventricular injection of atropine. Through destructive lesion of the diencephalon or through functional suppression by means of tribromethanal narcosis acting on the diencephalon, the effect of pituitrin is abolished; this effect must then be conditioned upon a center situated in the thalamus. The author finds that posterior pituitary hormone acts on this center. Transported by the blood, the hormone acts on the sympathetic and sacral autonomic systems, with resulting vasoconstriction, pallor, etc.; in the ventricle, on the contrary, its action is exercised on the cranial autonomic system, on the parasympathetic, with resulting salivation, sweating, vomiting, and temperature drop. The emotions induce an increase of posterior pituitary hormone which must diffuse into the cerebrospinal fluid and exercise a parasympathetic action by means of the thalamic center, just as adrenalin has an antagonistic sympathetic action.—*E. H. Kemp* (Clark).

5667. **Daniélopolu, S., Radovici, A., & Marcu, I. Influence de la zone réflexogène cardio-aortique sur l'écorce cérébrale.** (Influence of the cardio-aortic reflexogenous zone on the cerebral cortex.) *Rev. neur.*, 1931, **38**, 810–815.—Mechanical stimulation of the sinus arteriosus may bring about convulsions, and the reflexogenous zone is not confined to the circulatory system. After rolandic strychninization the clonic movements and epileptiform attacks are of exaggerated frequency and amplitude when the central end of the vago-sympathetic is stimulated, or the blood pressure increased (by occlusion of the abdominal aorta), even after exclusion of the sinus. The effects are considerably diminished after vagotomy.—*E. H. Kemp* (Clark).

5668. **Eccles, J. C., Granit, R., & Young, J. Z. Impulses in the giant nerve fibres of earthworms.** *J. Physiol.*, 1933, **77**, 23P–25P.—Impulses are recorded by a Matthews oscillograph from three very large non-myelinated nerve fibers in the ventral nerve cord of the earthworm when the head or tail of the earthworm is stroked with a feather. Preliminary work on the polarization of these nerves by galvanic currents seems to bring out certain differences from vertebrate nerve, which may be ascribable to the polarization of the transverse membranes which divide the giant nerve fibers into segments.—*M. A. Rubin* (Clark).

5669. **Feng, T. P. The role of lactic acid in nerve activity.** *J. Physiol.*, 1932, **76**, 477–487.—Frog's nerve is definitely poisoned by soaking in 0.37–0.4% iodoacetic acid for two hours or longer. The poisoning effect shows itself in the inability of such nerve to endure prolonged activity in oxygen. Such nerve is also much more readily asphyxiated in nitrogen than normal. Giving sodium lactate to poisoned nerve improves its capacity for prolonged activity in air or oxygen; in nitrogen the time to complete asphyxiation with or without continuous stimulation does not seem to be lengthened by the presence of lactate, except occasionally and slightly. On readmission of oxygen the superiority of the poisoned nerve containing the lactate again manifests itself in its greater and quicker recovery. These results indicate that frog's nerve is capable of utilizing lactic acid by oxidation, and that the formation of lactic acid, though not essential to nerve conduction, enables the normal nerve to perform long hours of continuous function.—*M. A. Rubin* (Clark).

5670. **Fromherz, H., & Hill, A. B. The action of veratrine on frog's nerve.** *J. Physiol.*, 1933, **77**, 25P.—In a nerve veratrinized after poisoning and recovery from asphyxiation, the heat produced in response to a single condenser discharge may be 100 to 1000 times as great as in a normal nerve.—*M. A. Rubin* (Clark).

5671. **Graham, H. T., & Gasser, H. S. Modifications of nerve response by veratrine, protoveratrine and aconitine.** *J. Pharmacol. & Exper. Therap.*, 1931, **43**, 163–185.—The effect of veratrine on nerve may be divided into two phases: in the first there is an augmented and prolonged potential with lengthening of the supranormal phase and lowering of the threshold of excitation of the resting nerve; the second phase is produced by a greater intensity or duration of action and in it the height of the potential begins to diminish while there is a diminution of speed of conduction, a relative augmentation of the refractory period, and a heightening of the threshold of excitation. During a period of asphyxia the resulting veratrinic potential is diminished; with the readmission of oxygen it is augmented to a value higher than its initial value. Protoveratrine and aconitine bring about a less marked prolongation of the resulting potential than that caused by veratrine.—*E. H. Kemp* (Clark).

5672. **Granit, R. The components of the retinal action potential in mammals and their relation to the discharge in the optic nerve.** *J. Physiol.*, 1933, **77**, 207–240.—The complex retinal potential arising in the retina on stimulation with white light appears after a latent period involving synaptic interaction, and hence cannot arise distal to the locus where the first synapses occur. The complex effect is an algebraical sum of three components: P I, P II, and P III. Only P II can be shown to be associated with the discharge of impulses through the optic nerve. P III appears to be related to an inhibitory process. P I does not appear to be concerned with the discharge of impulses, or, if so, to a very small degree.—*M. A. Rubin* (Clark).

5673. **Grundfest, H. Excitability of the single fibre nerve-muscle complex.** *J. Physiol.*, 1932, **76**, 95–115.—Using the retrolingual membrane in the tongue of the frog, data were obtained from indirect stimulation of nerve fibers lying in the membrane as well as from direct stimulation of both normal and curarized muscle fibers. It was found that the chronaxy is much smaller for the nerve fibers than for the muscle fibers, and that the excitation curves and the chronaxies of muscle fibers are unaffected by curarization. These results indicate (1) that the law of isochronism is invalid, at least for the retrolingual preparation, and (2) that Lapicque's explanation of the mechanism of curarization is incorrect. The author defends Rushton in the Rushton-Lapicque controversy. He also concludes that Moore and Brüke's explanation for the heterochronism which has been discovered in various nerve-muscle preparations has no experimental justification.—*M. A. Rubin* (Clark).

5674. **Heinbecker, P., Bishop, G. H., & O'Leary, J. Pain and touch fibers in peripheral nerves.** *Arch. Neur. & Psychiat.*, 1933, **29**, 771–789.—*V. M. Jones* (Boston Psychopathic Hospital).

5675. **Holmes, G. A contribution to the cortical representation of vision.** *Brain*, 1931, **54**, 470–479.—Observations made during the war led the author to place the projection of the vertical meridians of the retinae on the mesial and most exposed surfaces of the occipital lobes, and that of the horizontal meridians on the inner protected walls of the calcarine fissure (as did Henschen, 1911). A new observation lends support to this conception. A woman of 32 years presented a visual field greatly reduced on the left and entirely abolished at the level of the horizontal meridian. Autopsy showed that the lesion (angioma) was limited to the right hemisphere, and, moreover, to the region at the base of the calcarine fissure where the horizontal meridian of the retinal field was thought to be projected.—*E. H. Kemp* (Clark).

5676. **Jordan, H. J., & Lullies, H. Dekrementleitung, Ungültigkeit des Alles- oder Nichtsgesetzes, refraktäre Periode und Reizsummation beim Fussnerven von Aplysia limacina.** (Decrement conduction, invalidity of the all-or-nothing law, refractory periods and stimulus summation of the foot nerve of *Aplysia limacina*.) *Proc. Koninklijke Akad. Wetensch. Amsterdam*, 1932, **10**, 1196.—The neuromuscular system of many lower organisms (e.g. snails) transmits excitations not as impulses but by means of a general change of state in the entire nervous system. In contrast to this the peripheral nerves of vertebrates are usually thought of as functioning in independence of the stimulus magnitude. This is the all-or-nothing character of nervous processes. The only determinant of amount of function is the quantity of reacting tissue. An application of narcotics to the foot nerves of *Aplysia* caused a gradual diminution of muscular activity in that region; this was restored, however, by injections of salt water. These effects could not be demonstrated on frog muscles. Quick succession of electrical stimulations increases muscular response; the increase reaches the maximum when the stimulations are simultaneous. The all-or-nothing law does hold for higher organisms where nervous excitation occurs as impulses along inactive passage ways (the nerves).—*H. J. Jordan* (Utrecht).

5677. **Kodera, Y. Über den Verlauf der Reizzeit-Spannungskurve des motorischen Froschnerven.** (The course of the strength-duration curve of the frog's motor nerve.) *Pflüg. Arch. f. d. ges. Physiol.*, 1928, **219**, 174–180.—The strength-duration curve of the frog sciatic shows two (sometimes three) breaks, as first reported by Lucas. The location of the breaks depends in part upon the direction in which the change in current strength is made. This indicates two types of nerve fibers of differing speeds of conduction. Sympathetic fibers play no part, as their degeneration does not affect the result.—*B. F. Skinner* (Harvard).

5678. **Ledebur, J. F. v. Einfluss der Monojodessigsäure auf Reflextätigkeit, Gaswechsel und Zuckerverbrauch des Zentralnervensystems.** (Effect of moniodoacetic acid on the reflex activity, gas exchange and sugar consumption in the central nervous system.) *Pflüg. Arch. f. d. ges. Physiol.*, 1932, **230**, 229–237.—An irreversible loss of reflex activity in the frog, due to poisoning of the spinal cord, follows perfusion of the cord with moniodoacetic acid 1:15,000, and is accompanied by a cessation of sugar consump-

tion, although the gas exchange is not affected for several hours.—*B. F. Skinner* (Harvard).

5679. **Matthes, K., & Ruch, T. C. Single-shock excitation and inhibition of contralateral extension in the spinal cat.** *J. Physiol.*, 1933, **77**, 258–271.—It is reported that single afferent volleys are effective stimuli to contralateral extension in the spinal cat. Single-shock crossed extensor reflexes are typically of short latency (20–35σ), though the latent period may be as short as 8.7σ or as long as 100σ. The degree of inhibition of the reflex by an ipsilateral single shock depends on the interval separating the two stimuli. The level of inhibition increases rapidly as an ipsilateral stimulus is approached in time to a preceding contralateral shock until an optimal interval is reached. Despite its ipsilateral path, inhibition varies slowly when sampled at intervals by a following excitatory stimulus, but it can subside in a period as short as 25σ.—*M. A. Rubin* (Clark).

5680. **McDowell, R. J. S. A convenient method of studying the reactions of the vaso-motor center.** *J. Physiol.*, 1933, **77**, 21P–22P.—The method is suggested as an excellent substitute for the plethysmograph.—*M. A. Rubin* (Clark).

5681. **McSwiney, B. A., & Spurrel, W. R. The gastric fibres of the vagus.** *J. Physiol.*, 1933, **77**, 447–458.—Stimulation of individual roots of the vagus produces no evidence of different types of nerve fiber responsible for motor or inhibitor effects on the stomach, and the functional path of the gastric fibers is confined to that nerve and has no essential connection with the sympathetic.—*M. A. Rubin* (Clark).

5682. **Moracci, E., & Capri, A. Azione di alcuni sali applicati direttamente sui centri corticali sensitivo-motori del cane.** (Action of some salts applied directly to the cortical sensorimotor centers of the dog.) *Arch. di fisiol.*, 1931, **29**, 487–492; 493–511; 512–535.—Sulfate of ammonia is a weak depressant; lithium salts are stimulants and (carbonate excepted) lower the threshold of excitability of the motor cortex when used in weak solutions; in very strong concentration lithium salts provoke clonico-tonic contractions of the muscles controlled by the cortical area involved, and with the very strongest concentrations, there is diffusion to other muscular groups. Creatine, in powder, has a similar clonico-tonic action, which differentiates it, along with lithium salts, from strychnine, nicotine, morphine, and picrotoxine, which have exclusively clonic action. The hypothesis is presented of different levels of cortical action for clonic excitation and for tonic excitation.—*E. H. Kemp* (Clark).

5683. **Olmsted, J. M. D., & Hodgson, P. An explanation of the results of the "alcohol block."** *Amer. J. Physiol.*, 1931, **97**, 597–601.—*E. H. Kemp* (Clark).

5684. **Parin, W. W. Der Mechanismus der Milzkontraktion bei Reizung sensibler Nerven.** (The mechanism of contraction of the spleen during excitation of the afferent nerves.) *Pflüg. Arch. f. d. ges. Physiol.*, 1931, **228**, 329–343.—Variations in the volume of the spleen upon stimulation of an afferent nerve have been recorded, using the curarized cat. Contractions are produced, which do not disappear when the organ is denervated. Extirpation of the suprarenal bodies or section of their secretory nerves abolishes the effect, but only if the organ has been previously deprived of its nerve supply. The adrenal secretion does not produce its effect through the raising of blood pressure, for the simple augmentation of the latter produces instead a dilatation. A humoral mechanism must be thought of which is superimposed upon a reflex neural mechanism. The spleen, reservoir of red blood corpuscles, should respond actively in the general mobilization of energy which, according to Cannon, characterizes emotion.—*E. H. Kemp* (Clark).

5685. **Plattner, F., & Tsuiji, R. Zur Frage der Änderung der Vaguserregbarkeit nach Seruminjektion.** (On the change in excitability of the vagus following injection of serum.) *Pflüg. Arch. f. d. ges. Physiol.*, 1932, **229**, 738–745.—The finding of Davoli that the injection of serum increases the excitability of the vagus is not confirmed.—*B. F. Skinner* (Harvard).

5686. **Riegele, L. Die Cytoarchitektonik der Felder der Broca'schen Region.** (The cytoarchitectonics of the fields in the area of Broca.) *J. F. Psychol. u. Neur.*, 1931, **42**, 496–514.—The examinations of the present author confirm the conclusions of C. and O. Vogt, who divided the area of Broca into 10 separate fields. This is in disagreement with the division of the field by Brodmann, who thought that only three fields were distinguishable. The author also finds slight limitations or boundaries between the neighboring fields, in opposition to the claim of continuity of Economo-Koskinas. Great differences in the fiber structure of the different fields were found and the cellular differentiation was said to be striking in some cases, though not in all. The author has found seven of these fields in the chimpanzee.—*E. H. Kemp* (Clark).

5687. **Saul, L. J., & Davis, H. Action currents in the central nervous system.** *Arch. Neur. & Psychiat.*, 1933, **29**, 255–259.—A method is described for the study of nerve impulses in the central nervous system. Responses were obtained from the proprioceptive, tactile, auditory and optic pathways. "Spontaneously" discharging points in the brain were observed. Two electrical effects were distinguished in the acoustic mechanism, true action currents and "spread."—*V. M. Jones* (Boston Psychopathic Hospital).

5688. **Speidel, C. C. The growth and repair of nerves.** *Scient. Mo.*, 1933, **37**, 47–49.—Descriptions are given of the moving tip of a growing nerve fiber and of the formation of myelin as observed in the transparent tail fin of an anesthetized tadpole. Many details have been recorded by the motion picture method.—*J. F. Dashiell* (North Carolina).

5689. **Van Bogaert, L. Sympathique et sensibilité.** (The sympathetic nervous system and sensibility.) *J. belge de neur. et de psychiat.*, 1933, **33**, 378–384.—

A general review of the researches of Auguste Tournay on the influence of the sympathetic nervous system on sensibility. Each topic considered in the present paper has been reported separately and in detail elsewhere. A bibliography is appended.—*H. W. Karn* (Clark).

[See also abstracts 5635, 5711, 5718, 5722, 5739, 5743, 5746, 5860, 5891.]

MOTOR PHENOMENA AND ACTION

5690. **Aburel, E., Chauchard, A., & Chauchard, B. Réflexe moteur de la vessie et réflexe d'axone.** (Motor reflex of the bladder and the axon reflex.) *C. r. Soc. biol.*, 1931, **107**, 1267–1269.—The centripetal fibers of the hypogastric nerve controlling the reflex of bladder contraction have a chronaxy of 2σ, a normal figure for sympathetic branches. They have a limit of summation as high (3 seconds) as that of the centrifugal fibers of the same nerve. A reflex of contraction of the bladder has been described as brought about by stimulation of the centripetal end of the sectioned hypogastric nerve, after separation between the central nervous system and the inferior mesenteric ganglion, a reflex considered as ganglionic or an axon reflex; in reality it is only an effect of diffusion of electrical excitation, and disappears when this is avoided.—*E. H. Kemp* (Clark).

5691. **Ansart, M. B. Algunos problemas de mecánica aplicada al motor humano.** (Some problems of mechanics as applied to the human motor system.) *Med. d. trab. e higiene indus.*, 1933, **4**, 1–26.—Physiologists have attempted with varying degrees of success to apply the principles of general mechanics to the study of the human motor functions. The analogy made between the human physiological system and the mechanism of a machine leads to an undesirable teleology. The factor which most complicates the determination of the kinetic mass of the muscles, as well as all mechanical analyses of movements, is the multiplicity of the muscular energies put in play in any given movement or movements. Hitzig has maintained that the human cerebrum is not concerned with muscles but rather with movements. Isolated muscular contractions are difficult to obtain. The simplest movements are influenced by heredity, environment, and many other factors. The behavior of the muscular system is characteristically appropriate to the motor end which is pursued. Economy of movement is another factor in behavior. Today the scientific organization of industry does not primarily concern itself with the maximum efficiency of the worker, with the rationalization of work, nor the mere mechanization of work activity, but rather with the humanization of industry. The well-being of man is the end in view rather than his productivity. —*J. W. Nagge* (Chicago).

5692. **Bartholomé, H. Ueber Gesichtsreflexe.** (Concerning facial reflexes.) Freiburg i. Br.: M. Gladbach, 1932. Pp. 32.—The clinical applicability of facial reflexes is comparatively slight, but some of them correlate fairly well with certain head diseases (e.g., tumor of the hind brain with contractions of the eye-brows, ear and lid reflexes, and corneal reflexes). This method does not constitute a complete diagnosis, but may be usefully employed in connection with a larger survey to determine disease.—*H. Bartholomé* (Hagen i. Westfalen).

5693. **Briscoe, G. Inhibition in peripheral preparations of skeletal muscle.** *J. Physiol.*, 1932, **76**, 11P–13P.—*M. A. Rubin* (Clark).

5694. **Briscoe, G. "Postural reversal" in peripheral preparations.** *J. Physiol.*, 1932, **76**, 52–65.—It is suggested that the "postural" or "movement reversal," which can be shown in the absence of the reflex arc by making use of peripheral factors only, is caused by changes in the receptivity of the opposing muscles, the constant stimuli applied to the respective nerves being just subliminal under slight stretch and just supraliminal when they are under increased stretch. It seems that this change of receptivity is a factor in the smooth coordination of antagonistic muscles and in the changes of reflex response to different degrees of stretch. In the intact organism this peripheral adjustment in the executant part of the reflex arc probably supplements the reinforcement provided by reflex stimuli as the result of stretch.—*M. A. Rubin* (Clark).

5695. **Cotton, F. S. The relation of athletic status to the pulse rate, in men and women.** *J. Physiol.*, 1932, **76**, 39–51.—In giving a brief review of the literature, the author points out the necessity of developing quantitatively the prevailing agreement that slow pulse rates are characteristic of highly trained athletes. A mean basal rate of 47, the lowest group value yet recorded, is given for a group of eight highly trained swimmers. An attempt to trace the relation between the slowing of the pulse rate with the extent of athletic history in the case of 121 men, as gauged by a questionnaire, failed to yield convincing results, but a similar attempt based on the subject's estimate of his quantitative athletic history in comparison with his fellows showed marked differences between sub-groups of 237 men. Confirmatory results were obtained in the case of day-time pulse rates of 80 women who were asked to grade themselves in the same way.—*M. A. Rubin* (Clark).

5696. **Dernowa-Yarmolenko, A. A. The fundamentals of a method of investigating the function of the nervous system as revealed in overt behavior.** *J. Genet. Psychol.*, 1933, **42**, 319–338.—To determine age and sex characteristics of the functioning of the nervous system, an associated-reflex (or conditioned-reflex) technique is elaborated. Three simple associations (tap of pencil followed after 2 seconds by lift of hand, by a spoken sound, by a tap of foot) are presented separately and in combinations, to test for formation of the associated reflex, its extinction, associated inhibition, differentiation, integration, and traces. Age-sex curves are presented for a group of one thousand 8- to 19-year-old pupils. On the basis of group means and sigmas individual profiles can be drawn.—*J. F. Dashiell* (North Carolina).

5697. **Dill, D. B., Edwards, H. T., & Talbot, J. H. Studies in muscular activity. VII. Factors limiting the capacity for work.** *J. Physiol.*, 1932, **77**, 49–63.—

A study is made of three factors which may limit the capacity of a dog for work—external temperature, supply of oxygen, and supply of fuel. The performance of a dog is virtually tireless when the external temperature is low, when oxygen supply is adequate, and when fuel and water are supplied. The energy output is increased threefold after adrenalin injections, and is six times greater with corticoadrenal extract.—*M. A. Rubin* (Clark).

5698. **Dodge, R. Anticipatory reaction.** *Science*, 1933, **78**, 197–203.—The presidential address delivered before the New York branch of the American Psychological Association at New Haven, April 1, 1933. According to the author, the seemingly paradoxical situation involved in the anticipatory reaction represents, on the one hand, a serious discrepancy between the experimental science of mind and the common-sense conduct of life. On the other hand, it represents a problem of the scientific synthesis of apparently contradictory facts. "We conjecture that the answer lies not in the concept of the conditioned reflex but rather in the underlying fact of the spread of neural excitation and its systematization according to differential threshold."—*H. W. Karn* (Clark).

5699. **Drury, A. N. The depressor constituents of muscle extracts.** *J. Physiol.*, 1932, **76**, 15P.—The author suggests that cytidylic acid may be present in muscle extracts and may play a part in their depressor activity.—*M. A. Rubin* (Clark).

5700. **Fessard, A. B., Fessard, A., & Laugier, H. L'accélération cardiaque d'effort et son développement avec l'âge.** (Cardiac acceleration and its development with age.) *Trav. humain*, 1933, **1**, 152–185.—Pulse was taken before and after running 50 meters. The acceleration in pulse tended to increase with age through the range from 6 to 16. In most instances the difference in the acceleration of adjacent one-year age groups is statistically significant. The correlation of acceleration (increase in pulse after running) and age is .58, and after partialling out initial resting pulse rate it is .40. An explanation of the results is not suggested.—*H. E. Burtt* (Ohio State).

5701. **Garvey, C. R. A study of conditioned respiratory changes.** *J. Exper. Psychol.*, 1933, **16**, 471–503.—Increases in the amount and irregularity of breathing, as well as movement of the finger, were conditioned to a buzzer and a vibrator, based on the reactions to faradic stimulation. The more important results are summarized as follows: (1) At the beginning of the experiment the buzzer and vibrator produced small respiratory changes without shock. With control subjects these original responses disappeared upon repetition of the unreinforced signals. (2) Differences in variability and definiteness between respiratory changes following simple and those following strong emotional stimuli are pointed out. (3) Pavlov's results on summation were corroborated in that a compound signal, the components of which had been conditioned, produced greater conditioned responses than either of the components alone. (4) The present findings differed from those of Pavlov in that the compound signal used in these experiments produced responses even greater than the sum of the conditioned responses to the components alone. (5) The relation between the magnitude of the response and the length of interval preceding the test stimulus supports the expectation hypothesis of the conditioned response. Lack of such relation in the case of subjects who have not been conditioned confirms this support. (6) Spontaneous verbal reports of subjects support the expectation hypothesis and a response interpretation of feeling.—*H. W. Karn* (Clark).

5702. **Gibbs, O. S., & Szelöczey, J. Humoral transmission and the chorda tympani.** *J. Physiol.*, 1932, **76**, 15P.—Acetyl choline is produced in the submaxillary glands of cats and dogs by stimulation of the chorda tympani. The author confirms the work of Loewi on the isolated frog heart, and the work of Engelhart on the eye.—*M. A. Rubin* (Clark).

5703. **Gurevich, M. [Psychomotricity.]** Moscow, Leningrad: Gosmedizdat, 1930. Pp. 160.—This is the first volume of a two-volume work of which a translation of the second volume by Oseretzky was published as Beiheft 57 of the *Zeitschrift für angewandte Psychologie*. After a brief survey of the anatomical and physiological facts, the author presents an attempt at a rational classification of motor functions based on the physiological conditions. He is aware that the functions are not simple, but attempts to make his classification in terms of groups more or less dominated by a single aspect. The components distinguished are as follows: (1) extra-pyramidal components: tonus; alternation of innervation; tempo; rhythm; automatic movements; auxiliary movements; (2) pyramidal components: the force of movements; precision; (3) cerebellar and cortical components: equilibrium; coordination; (4) frontal components: motor activity; capacity for elaboration of motor patterns; capacity for maintaining these patterns; capacity for executing simultaneous movements; secondary automatism.—*M. G. Willoughby* (Clark).

5704. **Hammouda, M. The central and reflex mechanism of panting.** *J. Physiol.*, 1933, **77**, 319–337.—Panting takes place only when the optic thalami are intact, and panting observed in anesthetized animals on raising the body temperature is due to direct heat upon the optic thalami, not to any reflexes in response to raising the temperature of sensory nerve endings in the head. The experiments failed to demonstrate the existence of any special receptors in the body which would reflexly evoke panting in response to a rise in temperature. The normal non-anesthetized animal pants reflexly with or without a very small initial rise in body temperature, which exhibits the character of a conditioned reflex. It is suggested that what is known as reflex panting is a conditioned reflex which is developed, not on the basis of an unconditioned reflex, but on that of the purely central effect of heat. This is similar to the conditioned reflexes established as the result of injection of various centrally acting drugs.—*M. A. Rubin* (Clark).

5705. **Hartree, W. A negative phase in the heat production of muscle.** *J. Physiol.*, 1932, **77**, 104–110.

—A new method for heating muscle without excitation is described. In frog's muscle at 0° C., after a short tetanus there is a negative delayed heat production which is usually very small for early stimuli, and this increases, for later stimuli, up to about 8% of the initial heat. This heat is complete in 30 to 60 seconds, when it is followed by the usual positive delayed heat, which at higher temperatures comes on so quickly as to mask it completely. The author suggests that the negative delayed heat may be associated with the endothermic restoration of phosphagen.—*M. A. Rubin* (Clark).

5706. **James, W. T. The effect of reward on the response to painful experience in the conditioned reflex.** *Amer. J. Physiol.*, 1933, **106**, 71–79.—Since dogs in a conditioned avoiding situation of pain and danger show a strong sympathetic reaction, as indicated by breathing and general behavior, it is assumed that suprarenal activity is involved. The shock used was intense enough to make the dog raise the leg and to involve the entire body vigorously in the avoiding reaction. After a few repetitions the reaction was limited to the foreleg. Once avoidance of pain and response to the conditioned signal was established, the dogs did not show any further signs of nervous disturbance. They appeared alert during the experiments and raised the leg to every new sound presented. Wide generalization similar to that of the salivary reflex was not found. Hence the author feels justified in concluding that in situations involving danger and pain to the organism, generalization of the response to various signals is wider than in situations involving the food-taking adjustments.—*C. Landis* (N. Y. Psychiatric Institute).

5707. **Katz, D. Zur Grundlegung einer Bedürfnispsychologie.** (On the foundation of a psychology of needs.) *Zsch. f. Psychol.*, 1933, **129**, 292–304.—The concept of needs is held to be basic to an understanding of all phases of psychological activity. The general problems are reviewed, and specific examples are drawn from studies of hunger and appetite.—*R. B. MacLeod* (Swarthmore).

5708. **Klestchov, S. V. [The relation of sounds as a conditioned stimulus.]** *Trudi fisiol. lab. Pavlova*, 1933, **5**, 213–218.—In the case of a complex stimulus composed of several components (which inevitably includes their ratio), a generalization acquires more complicated forms. Not only does it embrace a fixed region, but it also determines in this region an increased activity of other complex stimuli included in analogous relations.—*A. Yarmolenko* (Leningrad).

5709. **Korngold, S. Contribution a l'étude de la constance des sujets dans les efforts moteurs.** (Constancy of subjects in motor effort.) *Trav. humain*, 1933, **1**, 186–191.—The measures involved are maximum force exerted on a hand dynamometer, time during which the pressure could be maintained without dropping to less than half the maximum, and similar measures with a special dynamometer that utilized both arms and hands. In every technique there is a higher correlation between second and third trials than between first and second. This may possibly be due to the subject's increasing consciousness of his muscular effort. It indicates the unreliability for practical purposes of a single brief motor test of this sort.—*H. E. Burtt* (Ohio State).

5710. **Lapicque, L. Retrograde polarization, a theory of systematic errors in measurements of muscular chronaxie through Ringer's fluid or with large electrodes.** *J. Physiol.*, 1932, **76**, 261–283.—Measurements of chronaxy are made with electrodes of capillary glass tubes of varying diameters. Between 0.1 and 0.5 or 0.6 mm. the chronaxy remains invariable and equal to the one given by a silver wire taken as electrode on a muscle in air. The value so found, 0.3 σ as a rule, is the true chronaxy (for frog's sartorius muscle). From 0.5 to 0.6 mm. up the chronaxy, or better pseudo-chronaxy, increases regularly with the size of the cathode, reaching a value as high as 2 or 3 σ for a diameter of 2 or 3 mm. The author offers the foregoing evidence as a defense for his law of isochronism and as a refutal of Rushton's criticisms. There is a post-scriptum versus Rushton.—*M. A. Rubin* (Clark).

5711. **Lapicque, M. Excitabilité du sympathique en tant que modificateur de la chronaxie musculaire.** (Sympathetic excitability as a modifier of muscular chronaxy.) *C. r. Soc. biol.*, 1931, **107**, 961–963.—*E. H. Kemp* (Clark).

5712. **Levine, M. Measurement of electrical skin resistance.** *Arch. Neur. & Psychiat.*, 1933, **29**, 828–842.—*V. M. Jones* (Boston Psychopathic Hospital).

5713. **Liberson, W., & Marquès, P. Entrainement et réflexes conditionnés.** (Training and conditioned reflexes.) *Trav. humain*, 1933, **1**, 204–206.—Pulse was recorded while the subject was riding a bicycle ergometer for five minutes without load and one minute with load. Acceleration of pulse in the first minute becomes less marked with repetition of the experiment. This is attributed to a decrease in "internal inhibition." The pulse during the loaded period appears to be related to the excitation or inhibition during the preceding unloaded period.—*H. E. Burtt* (Ohio State).

5714. **Mahler, W. Ersatzhandlungen verschiedenen Realitätsgrades. Untersuchungen zur Handlungs- und Affektpsychologie XV. Herausgegeben von K. Lewin.** (Substitution acts of a different degree of reality. Studies of action and affect psychology. Edited by K. Lewin.) *Psychol. Forsch.*, 1933, **18**, 27–89.—It was shown by Zeigarnik that unfinished tasks are retained better than finished, and by Ovsiankina that subjects tend to resume unfinished tasks. A third form of the problem is in the production of substitution acts. Freud has already pointed out the importance of substitution in psychic life. The escape of an individual into unreality offers a relief. It is in view of this that the present investigation was performed. 155 adults and 35 children (6–10 years) were used. A system had to be set in tension, then a substitute act had to be induced, and finally a way had to be found for testing whether this substitute act had produced a resolution of the tensions in the original system. Problems were given the

subjects and these were interrupted before they were finished. This produced the tension. The experimenter then suggested a substitute solution. The criterion of whether the tensions were resolved was the frequency of a return to the problem following the method of Ovsiankina. The greater the frequency of return to the problem the less value the substitution has. It was found that the frequency of a return to problems was greatly decreased by the substitute solution of the problem. If "acting" and "talking" are considered steps of reality in substitution acts, then the substitution value of acting is greater than the substitution value of talking. The social implications of the substitute acts are discussed, together with the degree of reality of fantasy for children.—*J. F. Brown* (Kansas).

5715. **Marbe, K. Theorie der motorischer Einstellung und Persönlichkeit.** (The theory of motor set and personality.) *Zsch. f. Psychol.*, 1933, **129**, 305–322.—The determination of motor sets by inherited and acquired dispositions and their role in explicit and implicit volitional performance are discussed and illustrated. Motor sets are regarded as specific products which cannot be defined wholly either in psychological or in physiological terms. The totality of motor sets at any given moment is termed the motor personality.—*R. B. MacLeod* (Swarthmore).

5716. **McGeoch, J. A., & Peters, H. N. An all-or-none characteristic in the elimination of errors during the learning of a stylus maze.** *J. Exper. Psychol.*, 1933, **16**, 504–523.—The authors measured the time spent at each entrance into the alleys during the learning of a 10-alley Warden maze by 30 college students. The temporal course of elimination was studied by three different methods of treating the results. An analysis of the findings is interpreted to mean that error elimination, under the conditions employed, proceeds according to an all-or-none principle which is stated as follows: "After the brief period of initial adjustment and orientation and particularly during the last half of the trials taken to learn, an alley is entered for a period of time which is on the average nearly a constant for that alley, or it is not entered at all. This period of time is much longer than would be required for a simple entrance-exit movement. The law may be stated in terms of elimination to read: In the learning of a stylus maze, an alley is eliminated completely, in terms of time spent, if it is eliminated at all. The temporal magnitude of the error does not, during the last half of the learning period, decline gradually; it is constant until it disappears suddenly and entirely."—*H. W. Karn* (Clark).

5717. **Murray, M. M. The diuretic action of alcohol and its relation to pituitrin.** *J. Physiol.*, 1932, **76**, 379–387.—The mechanism of alcohol diuresis is studied in two parts: (1) experiments on normal human subjects; (2) experiments on cats under amytal. Comparing the action of alcohol on normal human subjects with that of certain recognized diuretic substances, it was found to have a rapid and powerful diuretic effect, antagonizing that of an injection of pituitrin. It is considered from the results that the effect of alcohol is an exaggerated water diuresis, not a specific effect on the kidneys. In amytalized cats, alcohol antagonized the diuretic effect of pituitrin injection, but did not act as a diuretic by itself.—*M. A. Rubin* (Clark).

5718. **Pritchard, E. A. B. Central mechanism of the reflex arc.** *Brain*, 1931, **53**, 431–448.—After having shown that the changes produced by fatigue in the voluntary electromyogram may be explained in terms of a central mechanism acting on the motor discharge of direct medullary neurons, the author has constructed a ballistic model which seems to him to take account of the processes observed.—*E. H. Kemp* (Clark).

5719. **Ranschburg, P. Beiträge zum Verhalten der Reflexe, Automatismen und bewussten Funktionen in scheinbar unbewussten Zuständen.** (Contributions to the study of the action of reflexes, automatisms and conscious functions in apparently unconscious states.) *Zsch. f. Psychol.*, 1933, **129**, 338-352.—Case reports of narcotization (rectal method) are reported, and the progressive loss of function analyzed. Evidence is found in the behavior of apparently unconscious patients for the assumption of a continuous gradation from the merely conscious (without self-consciousness) to the fully self-conscious state. No evidence is found for the assumption of anything in the nature of conscious processes on the purely vegetative level.—*R. B. MacLeod* (Swarthmore).

5720. **Renqvist, Y., & Parviainen, S. Lokalisation der Schwellenzuckungen im Froschmuskel und diskontinuierliche Reizzeitspannungskurven.** (The localization of liminal convulsions in frog's muscle and discontinuous stimulation-time curves.) *Skand. Arch. f. Physiol.*, 1931, **72**, 299–310.—Microscopic observation of liminal responses in the geno-hyoid muscle, with recording of degree of response produced with shorter or longer durations of excitation. Verification of the linear law of Hoorweg-Weiss, with a deformation, such as Lapicque has observed, when very short durations are used.—*E. H. Kemp* (Clark).

5721. **Robinson, M. H. B., & Thompson, J. H. The effect on the body temperature of animals of injections of an extract of parathyroid glands.** *J. Physiol.*, 1933, **77**, 26P–27P.—Parathyroid extract lowers the body temperature of rabbits and rats. Preliminary experiment indicates that injection of anterior pituitary extract can raise the temperature of animals in which it had been lowered by injection of a parathyroid extract.—*M. A. Rubin* (Clark).

5722. **Rosenblueth, A., Forbes, A., & Lambert, E. Electric responses in the submaxillary gland.** *Amer. J. Physiol.*, 1933, **105**, 508–517.—"The electric responses of the submaxillary gland of the cat to stimulation of the chorda tympani and the cervical sympathetic nerves were recorded. The action of pilocarpine and atropine was also studied. Single shocks applied to the chorda elicit a complex response in which two components may be distinguished, a quick and a slow. Repetitive stimulation of the chorda

produces summation of each of the two components separately. The response to tetanic stimulation may be rhythmic. Single shocks on the sympathetic did not cause any perceptible electrical disturbance. Tetanic stimulation gives a picture similar to that obtained from the chorda. Pilocarpine produces variable results. The response may be rhythmic. The gland is refractory to nerve stimulation while under the influence of the drug. Moderate doses of atropine, sufficient to paralyze secretion, abolish the quick component of the response to chorda stimulation, while the slow effect persists. Larger doses abolish all electric responses. The electrical phenomena recorded are correlated with the secretory process. An excitatory component probably does not appear in the records. It is shown that atropine acts on the effector. The parasympathetic innervation of the submaxillary is not an 'iterative' system."—*C. Landis* (N. Y. Psychiatric Institute).

5723. **Ruch, F. L. Adult learning.** *Psychol. Bull.*, 1933, **30**, 387–414.—A review of 46 titles, published within the last thirty years, under the headings: (1) methodology (three important problems imperfectly solved in this field are: random sampling, equalizing motivation, controlling initial ability); (2) learning ability (the weight of the evidence is that age beyond 20 affects the learning of meaningful verbal materials less adversely than sensory-motor learning or learning nonsense materials); (3) form of the learning curve (older subjects show less "adaptation" and more "facilitation"); (4) retention (evidence is conflicting); (5) transfer and inhibition (evidence is inconclusive); (6) reminiscence (it seems definitely established that amount of recall decreases with age). The survey does not cover immediate memory, as digit span or fidelity of report.—*J. F. Dashiell* (North Carolina).

5724. **Ruger, H. A. On the interrelationship of certain characters in man (males).** *Ann. Eug.*, 1933, **5**, 59–104.—Static physical characters: stature, sitting height, span of arms, weight. Dynamic physical characters: strength of pull, grip of stronger hand, grip of right and left hands, swiftness of blow, and vital capacity. Standard age adopted 40.5 years.—(Courtesy *Bibliographia Eugenica*).

5725. **Schwarz, G. Über Rückfälligkeit bei Umgewöhnung. Teil II. Über Handlungsganzheiten und ihre Bedeutung für die Rückfälligkeit. Untersuchungen zur Handlungs- und Affektpsychologie XVI. Herausgegeben von K. Lewin.** (On relapse in the changing of habits. Part II. On act totalities and their importance for relapse. Studies of action and affect psychology XVI. Edited by K. Lewin.) *Psychol. Forsch.*, 1933, **18**, 143–190.—Whether mistakes are made in changing habits depends on many factors, one of which is the act totality. The act is not limited to motor movement, but also includes inner processes. The writer wishes to investigate the origin and change of act totalities on the material gained from a study of relapse mistakes. A special apparatus was constructed for learning and relearning a task. The way total acts are formed from partial acts, the rise and fall of act totalities, and the structure of these acts were studied. Act totalities were found in accordance with the manner of union of the parts, with the holding together of parts, and with the structure form. According to the strength of the union there are degrees of strength from the strong Gestalt to the pure and-sum (*Und-Summe*). The number of partial acts in a total act ranged from 1 to 5 on the one hand, and from 20 to 30 on the other. The essential factor in the structure form is emphasis. By a change of emphasis a change in the structure form is possible. Similarities and equalities between the parts favor the production of a whole, differences inhibit it. Sudden appearances of strong differences in emphasis inhibit or destroy a whole. Mere repetition is not important for the production of whole acts. Continued repetition may destroy the whole. The strength of the union increases the relapse tendency. The less the emphasis of the part to be changed as opposed to parts of greater emphasis, the stronger the relapse. The position of the part to be changed in the whole is of no importance in the occurrence of the relapse.—*J. F. Brown* (Kansas).

5726. **Segre, R., & Martinengo, V. Sui fenomeni vasomotori della mucosa nasale degli alcoolisti.** (On the vasomotor phenomena of the nasal mucosa in alcoholics.) *Boll. malatt. orecch., gola e naso*, 1932, **50**, 30.—The authors have observed 100 chronic alcoholics; they have proved that this reaction is neither typical nor frequent, and that it appears subject to several foreign influences, whereas the nasal mucosa reacts to adrenalin in a characteristic way, that is to say with an insufficient vaso-constriction, followed by a paralytic vaso-dilatation. This reaction, on the contrary, exists in 90% of the cases and is evident also where all other somatic symptoms of alcoholism are absent and where the psychopathy assumes a light and non-characteristic form. The alteration of excitability to adrenalin may have its cause in the ready exhaustion of local vasal tonus in relation with the central vaso-motor lability; it may be the symptom of a corresponding cerebral and meningeal vasomotor derangement, derangement that will furnish explanation of the chronic psychopathy when there is no anatomical manifestation which can be considered as a pathogenetic factor.—*R. Calabresi* (Rome).

5727. **Stolte, K. Der Babinskische Fusssohlenreflex.** (The Babinski reflex.) *Jahrb. f. Kinderhk.*, 1933, **89**, 163–164.—The author believes that plantar flexion is a conditioned response acquired prior to the age of walking. The Babinski reflex has, therefore, pathological significance only if the child has arrived at the age of standing and walking.—*K. C. Pratt* (Michigan Central State Teachers College).

5728. **Telford, C. W., & Thompson, N. Some factors influencing voluntary and reflex eyelid responses.** *J. Exper. Psychol.*, 1933, **16**, 524–539.—The amplitudes of reflex and voluntary eyelid responses to a regularly recurring stimulus with varying time intervals between responses have been studied by the

authors, and the following results obtained: (1) Amplitude of reflex eyelid responses increases with increase in the length of the time interval between responses from ½ to 4 and possibly to 6 seconds. (2) With voluntary reinforced eyelid responses to the same stimulus the average amplitudes of the responses are greatest at the ½ and 6 second intervals. The 1, 2, and 4 second intervals show smaller averages. These results differ from those obtained under comparable conditions except that an irregular instead of a regular time interval was used. In the former procedure the greatest amplitude of response was obtained when 2 seconds intervened between successive responses. As the interval was decreased to 1 and ½ or increased to 4 and 6 seconds the responses decreased in amplitude. (3) Reading retards, while working mental arithmetic increases the rate of the normal rhythmic eyelid responses of college students when the winking rate obtained while the subjects are carrying on their ordinary conversation is taken as normal.—*H. W. Karn* (Clark).

5729. **Voigt, E. Ueber den Aufbau von Bewegungsgestalten.** (Concerning the structure of movement Gestalten.) *Neue psychol. Stud.*, 1933, **9**, 1–32.—The visual phenomena demonstrated by Gestalt psychology can be observed in motor phenomena also. Motor Gestalten are rhythmical, organized wholes of a character clearly distinguishable from a piecewise succession of movements. The relation between stimulus distribution and such motor Gestalten may also be demonstrated. Uniformly timed, equally intense stimuli correspond with "successful, smooth, flowingly rhythmic movements." Where the stimuli are less evenly distributed the movement whole tends to absorb minor irregularities and itself be comparatively smooth despite inequalities among its constituent parts. Thus it was found that results given by a group of adults in jumping a fixed distance showed far less scatter than a consideration of the several parts of that performance (running speed, angle of leap) would have predicted.—*E. Voigt* (Leipzig).

5730. **Walter, W. G. The effect of fatigue on end-plate delay.** *J. Physiol.*, 1932, **76**, 116–127.—Measurements are made of the delay in the transmission from nerve to muscle by leading in of the electrical changes both to an amplifier and a Matthews oscillograph. Observation of the changes in the muscle conduction rate resulting from fatigue indicate that the change hitherto attributed to an intermediary substance was a change in the characteristics of the muscle. It is suggested that there is no need to postulate either a slower conduction rate in the terminal nerve fibers or the existence of a separate substance in order to account for the delay, which is less than the duration of the nerve action potential.—*M. A. Rubin* (Clark).

[See also abstracts 5579, 5599, 5626, 5629, 5656, 5673, 5680, 5734, 5735, 5736, 5744, 5745, 5748, 5749, 5818, 5877, 5883, 5918, 5921, 5944, 5990, 6036, 6038, 6044, 6046, 6049.]

PLANT AND ANIMAL BEHAVIOR

5731. **Elder, J. H., & Nissen, H. W. Delayed alternation in raccoons.** *J. Comp. Psychol.*, 1933, **16**, 117–135.—Three raccoons successfully performed single alternations after interpolated delays of 32 minutes. Two animals were successful after 64-minute delays. There was some evidence of delays of 2, 4, 16 and 24 hours. Controls indicated that the responses did not depend upon external cues or upon gross bodily orientation. The superiority of the responses in this apparatus over those obtained with other methods is discussed and several explanatory suggestions are offered. The delayed alternation method used in this study is regarded as suitable for comparative studies of memory.—*N. L. Munn* (Pittsburgh).

5732. **Gaw, E. A., & Stone, C. P. Is vision the cue used by rats learning the Stone multiple-light discrimination problem?** *J. Genet. Psychol.*, 1933, **42**, 464–468.—Rats that had mastered the discrimination problem, and then were blinded and retested through 50 trials, showed no retention and no relearning; and originally blinded rats showed no learning—which justifies the assumption that this problem depends upon visual cues only. Certain consistent individual position habits were observed.—*J. F. Dashiell* (North Carolina).

5733. **Hawley, J. M., & Munn, N. L. Visual discrimination of movement by white rats.** *J. Comp. Psychol.*, 1933, **16**, 137–142.—It was the purpose of this investigation to obtain a quantitative measure of the white rat's ability to discriminate between moving and stationary striae and to determine the minimal rate of movement necessary for the maintenance of such a discrimination. Moving and stationary patterns containing alternate black and white stripes were used. The stripes, 1.9 cm. in width, were vertical. Movement was from right to left. The animals were trained to respond positively to the moving pattern. After a discrimination had been obtained the motion of the positive pattern was gradually reduced until the animals no longer discriminated with greater than chance accuracy. The threshold for discrimination of movement under these conditions lay between surface speeds of 200 and 250 cm. per minute.—*N. L. Munn* (Pittsburgh).

5734. **Hermann, I. Zum Triebleben der Primaten. Bemerkungen zu S. Zuckerman: Social life of monkeys and apes.** (The instinctual life of primates. Notes on S. Zuckerman's *Social Life of Monkeys and Apes.*) *Imago*, 1933, **19**, 113–125.—There is much to be learned about the biological background of human instinctual life by close study of the instinctual and social life of apes. Primate society is founded upon the sexual attraction exerted by the females (monkeys and human beings are the only animals whose females are perenially receptive to the sexual advances of the males) and the physical dominance of male "overlords." The marked sexual activity of the female in "presenting" to the male for copulation is another observation refuting the frequently cited "sexual passivity" of the female. The transformation

of a heterosexual impulse into homosexual behavior is easy to observe among the "bachelors" who are prevented access to the females by the overlords, and in the latter themselves occasionally when one becomes angered by the too frequently repeated presentings of a female. All observers of monkeys agree that their "delousing" activities (misnamed, because monkeys rarely have lice) have a high social and sexual value. Picking through the fur of companions, one's own, or for that matter, any furred object, frequently leads directly to sexual activity. Hermann looks upon it as a longing for the mother deriving from the post-natal period, during which the infant clings to the mother's pelt. While pointing out the methodological fallacy of making comparisons of data from two widely removed fields of experience, some analogies of unconscious fears uncovered in analyses of patients with events in primate life are made. Thus the fear of destruction in the sense of castration, which the real or fantasied loss of the mother or of the sexual partner evokes in the human being, is a reality in sub-human primate society, where separation from the mother during the first few weeks of life means certain death, and loss of the sexual partner means usually a fight to death (most often of the disputed female) or loss of sexual function through deprivation of access to a suitable mate.—*R. Gosselin* (New York City).

5735. **Huizinga, E. Teilweise Entfernung der Pars superior labyrinthii bei der Taube.** (Partial removal of the pars superior labyrinthii in the dove.) *Pflüg. Arch. f. d. ges. Physiol.*, 1932, **229**, 441–446.—*B. F. Skinner* (Harvard).

5736. **Huizinga, E. Labyrinthausfall und galvanische Vestibularis-reaktion bei der Taube.** (Labyrinth destruction and the galvanic vestibular reaction in the dove.) *Pflüg. Arch. f. d. ges. Physiol.*, 1932, **229**, 466–472.—The survival of the galvanic vestibular reaction after the loss of all labyrinth functions following either extirpation or extensive injury is shown to depend upon the presence of the undegenerated nerve.—*B. F. Skinner* (Harvard).

5737. **Jordan, R. Der "Entlarver des Klugen Hans"—entlarvt!** (The "exposer of Clever Hans" exposed!) Gotha: Deutscher Tierfreund, 1932. Pp. 4. 50 Pfg.—The famous horse, "Clever Hans," to whom the Berlin school teacher Wilhelm von Osten taught arithmetic and spelling with such great success 30 years ago, is the subject of this paper. The horse was, professedly, exposed by Oskar Pfungst, assistant at the Berlin Psychological Institute and opponent of the theory that animals think. Pfungst maintained that the horse responded to ½ millimeter head-jerks unconsciously given by Von Osten as cues to the animal. This hypothesis is disproved now through records, found recently on the estate of Karl Krall, the well-known teacher of the Elberfeld horses. In a debate Nov. 21, 1912, at the University of Amsterdam, between J. van Rees and Oskar Pfungst, the former explained that he experimented on the Elberfeld horses and established the fact that the completely blinded horse "Berto," belonging to Krall, had also been instructed successfully in arithmetic and spelling. The professed exposer, Pfungst, was himself exposed by this conclusive argument against the hypothesis of the ½ millimeter head-jerks.—*R. Jordan* (Stuttgart).

5738. **Krechevsky, I. Hereditary nature of "hypotheses."** *J. Comp. Psychol.*, 1933, **16**, 99–116.—Continuing his investigations of the trial and error attempts of rats to master insoluble problems, the author finds evidence that the "bright" rats (Tryon's stock) "prefer spatial 'hypotheses' while the 'dull' rats prefer non-spatial 'hypotheses' (visual in this case) and the control rats show no preference." It is suggested that "maze brightness" is a specific rather than a general ability. Bibliography.—*N. L. Munn* (Pittsburgh).

5739. **Kropp, B. Origin of regenerating brain in the earthworm.** *Proc. Soc. Exper. Biol. & Med.*, 1933, **30**, 1393–1394.—In most specimens cerebral ganglia regeneration after removal of 5 head segments, and in some cases 10 segments of ventral nerve cord in addition, followed closely the course described by Heschler, the ganglia forming from cells of the body wall ectoderm which migrated posteriorly and medially. In some cases contribution from the dorsal pharynx wall was noted. The process of regeneration is described.—*P. Seckler* (Radcliffe).

5740. **Maidl, F. Die Lebensgewohnheiten und Instinkte staatenbildender Insekten.** (The life habits and instincts of community insects.) Vienna: Fritz Wagner, 1933. Pp. 64. 3.60 RM.—This work, arranged in twelve parts, displays an innovation in the systematic organization of biological material for the purpose of making the living manifestations of lower animals, so valuable for psychological investigations, more accessible than hitherto for the scientific circle interested in psychology. That is, the material is not arranged according to animal groups, but the organization follows groups of instincts defined at the beginning. Thus the reader can make valuable use of the concept of groups from the abundant and very accessible collected material. In keeping with this general plan of the work, the author avoids long, detailed, theoretical discussions concerning the concept of instinct, such as are popular in biological literature today. He also prefers, with good reason, to add a concept of instinctive action, since an argument for the existence of an instinct behind such action is not required.—*G. Bally* (Zürich).

5741. **Monnier, M., & Dubuisson, M. Etude à l'oscillographe cathodique des nerfs pédieux de quelques arthropodes.** (A study by means of the cathode-ray oscillograph of the pedal nerves of some arthropods.) *Arch. int. de physiol.*, 1931, **34**, 25–57.—In a crab, a lobster, and *Limulus*, stimulation of the pedal nerve by a break shock gives two waves of action potential: the first rapid, corresponding to a low chronaxy; the second four or five times slower, and corresponding to a chronaxy four or five times as high. It is probable that the slow wave corresponds to the volley of impulses controlling opening of the claw, while the more rapid wave corresponds to the

influx governing the more rapid muscles of closure.—*E. H. Kemp* (Clark).

5742. **Munn, N. L. An introduction to animal psychology: the behavior of the rat.** New York: Houghton Mifflin, 1933. Pp. xxii + 439. $3.00.—Some 670 articles and monographs have been reviewed and the data extracted from these are considered under seven sub-titles: (1) unlearned or instinctive behavior; (2) general activity and the strength and persistence of specifically motivated responses; (3) sensory functions, i.e., receptors, sense acuity, and cortical localization of sensory mechanisms; (4) the role of sensory mechanisms in adaptive behavior, particularly in learning; (5) factors on which the efficiency of learning and permanence of habits depend; (6) contributions to the theory and nature of learning; and (7) symbolic processes in the rat, the evidence for their existence, their nature and neurological correlates, and the conditions under which they can be elicited. The book has 107 illustrations and is fully documented. In addition, a classified and annotated bibliography pertaining to other laboratory animals is provided for those who desire to use this book as an introductory text for courses in comparative psychology.—*C. P. Stone* (Stanford).

5743. **Parker, G. H., & Paine, V. L. Progressive degeneration of the lateral-line nerve in the catfish.** *Proc. Nat. Acad. Sci.*, 1931, **17**, 589–591.—Good-sized specimens of *Ameiurus nebulosus*, after having their lateral-line nerves sectioned, were sacrificed at progressive intervals. Typical Wallerian degeneration was observed. At the end of about 14 days slight differences were observed between proximal and distal regions. After this the degeneration appeared as a progressive wave, which moved toward the periphery at the rate of about two centimeters per day. This wave was attributed to a metabolic process, which occurred as a result of the lack of material connection with the nucleus, and probably represented the function of the neuro-fibrillar system.—*E. H. Kemp* (Clark).

5744. **Razran, G. H. S. Conditioned responses in animals other than dogs.** *Psychol. Bull.*, 1933, **30**, 261–324.—A critical review of experimental studies on: (1) invertebrates—protozoa, crustacea and cephalopoda, gastropoda, chaetopoda, urochorda; (2) fish, amphibia, and reptilia; (3) birds and mammals—pigeons, chickens, rats, guinea pigs, rabbits, monkeys; also on (4) immunity in guinea pigs, rabbits, horses, and man. The reviewer indicates consistently such features in the many experiments reported as the conditioning and the conditioned stimulus, the reaction, and the controls when used, with emphasis upon quantitative aspects. Comparative tables are included. Some of his general conclusions follow: Typical conditioning has been exhibited in infusoria. There is no evidence that speed of conditioning increases consistently with ascent in the evolutionary scale. A transitional period of instability in establishing the C-R is common. A negative correlation appears between length of time before initial appearance of the C-R and the length of this transitional period. The instability of C-R's has been exaggerated by American writers, the salivary being an unusually easily unconditioned one. There is no established relation between speed of unconditioning and phylogenetic position, nor between the former and speed of conditioning. The rate of unconditioning is negatively accelerated. C-R's have been retained over many months. Differential, negative, and second-order C-R's, transfer, etc., have been observed in lower as well as in higher animals, whenever attempted. Finally, the positive evidence for conditioned immunity is suggestive though not conclusive.—*J. F. Dashiell* (North Carolina).

5745. **Richter, C. P. Cyclical phenomena produced in rats by section of the pituitary stalk and their possible relation to pseudo-pregnancy.** *Amer. J. Physiol.*, 1933, **106**, 80–89.—"Five rats in which the pituitary stalk had been sectioned showed extraordinary cycles in spontaneous activity and food- and water-intake. The frequency of the activity cycles was characteristic for each animal, 9.6, 11.2, 13.0, 14.3, and 18.4 days. The group average was 14.0 days. The cycles were characterized by sudden bursts of activity at regular intervals with a relatively low plateau between. Food- and water-intake were the lowest when the activity rise occurred, and highest midway between. This phenomenon appeared only in females. Vaginal smears showed cornified cells on the day the burst of activity occurred and dioestrous smears on the intervening days. Ovariectomy completely eliminated all the cycles in activity and food- and water-intake as well. In an attempt to assign the origin and significance to these cycles, it was pointed out that they probably represent even multiples of the fundamental 4 to 5 day ovulation cycles. The possible relation between the activity cycles produced by section of the pituitary stalk and the phenomenon of pseudo-pregnancy is also probably timed as a multiple of the 4 to 5 day cycle. It was concluded that the cycles originated in the ovaries rather than in the pituitary gland, otherwise the 4 to 5 day cycles would be found in the male as well."—*C. Landis* (N. Y. Psychiatric Institute).

5746. **Rose, M. Cytoarchitektonischer Atlas der Grosshirnrinde des Kaninchens.** (Cytoarchitectonic atlas of the cerebral cortex of the rabbit.) *J. f. Psychol. u. Neur.*, 1931, **42**, 353–440.—Rose has distinguished and described 73 fields or areas in the cortex of the rabbit. He stresses the importance of comparative cytoarchitectonics. Four general schemas and 43 double pages of sections are included.—*E. H. Kemp* (Clark).

5747. **Russell, E. S. Is comparative psychology an "objective" science?** *Scientia*, 1933, **54**, 181–190.—Criticism of the validity of comparative psychology as a science, well stated by Jennings, is analyzed in terms of three possible definitions of objectivity. "Objective" may mean "what a subject perceives through his senses," "verifiable by normal subjects through perception," or "material." The third meaning, used by Jennings, is based on a philosophical

doctrine, dualism of matter and mind, which may be accepted or rejected. In the sense of the second definition, the materials for comparative psychology are as "objective" as physical measurements. The first definition may be valid, since the existence of experience can be neither proved nor disproved. The physiological method uses the last two definitions, assumes that living things may be treated as inorganic objects, and is analytical; whereas the psychological method accepts the first meaning, assumes that animals may not be mere automata, and does not attempt a complete analysis of behavior. The two methods are strictly alternative, and the use of either depends upon its utility in practice.—*R. H. Brown* (Clark).

5748. **Schubert, G. Über die Einwirkung von Zentrifugalkraft auf die Augenstellung beim Fisch.** (The effect of centrifugal force on the tonic eye reflexes in the fish.) *Pflüg. Arch. f. d. ges. Physiol.*, 1932, **230**, 194–205.—The effect of centrifugal force upon the vertical and rotative movements of the eye of the fish are essentially the same as those of changing the relative direction of the gravitational force. In combining rotation about the long axis with tilting about the transverse axis the tonic eye reflexes may cancel each other. Consequently the receptors for these reflexes (the otoliths) must react in essentially the same way to the combined acceleration of centrifugal force and gravity as to changes in the gravitational pull alone.—*B. F. Skinner* (Harvard).

5749. **Ten Cate, J. Contribution à la physiologie comparée du cervelet. III.** (Contribution to the comparative physiology of the cerebellum. III.) *Bull. Stat. biol. d'Arcachon*, 1931, **28**, 147–174. Also as **Beiträge zur vergleichenden Physiologie des Kleinhirns. IV, V.** (Contribution to the comparative physiology of the cerebellum. IV, V.) *Arch. néerl. de physiol.*, 1931, **16**, 6–20; 21–32.—The author has extended his work on the cerebellum, in which he first used the dogfish, by including the rays. Unilateral extirpation of the cerebellum brings on a marked augmentation of tonus of that side (particularly flexion of the pectoral fins).—*E. H. Kemp* (Clark).

5750. **Tiegs, O. W. Note on the posture of the bird's wing, and its supposed control by sympathetic nerves.** *Amer. J. Physiol.*, 1931, **98**, 547–550.—In the pigeon, section of the alar preganglionic sympathetic fibers does not bring about a dropping of the wing when the possibility of compensation through somatic nerves is eliminated by section of the dorsal roots of the brachial plexus.—*E. H. Kemp* (Clark).

5751. **Underhill, C. R., & Phalen, H. R. Observations of animal behavior.** *Science*, 1933, **78**, 239.—Notes on observations by the authors of the behavior of the snake and honey-bee. In one case a small green snake was observed wriggling on a polished roadbed in southern New Jersey without making any forward progress. After being touched the snake shammed dead. Upon being turned over, it continued to roll over and over with ripples passing up and down its body "as though it employed the snake motion in turning or rolling over and over, sidewise—not like the alleged hoop snake." This type of behavior ceased when the animal reached the side of the road. In another case, a honey-bee was observed foundering in the center of a bird bath. In order to save itself it got over upon its back and floated, but could not make any headway toward shore. "Presently one of the several bees drinking around the shallow rim flew out over the center, came down close to the drowning bee, and, after the two had successfully locked their feet in some way, flew vigorously toward the shore and landed his hapless mate safely."—*H. W. Karn* (Clark).

5752. **Wever, E. G. Auditory nerve experiments in animals and their relation to hearing.** *Laryngoscope*, 1931, June. Pp. 4.—Abstract.—*E. H. Kemp* (Clark).

5753. **Wulf, O. "Kurwenal."** Stuttgart: R. Jordan, 1933. Pp. 52. M. 1.50.—This book is named for a dachshund which barks out correct answers by means of a number-alphabet. It contains a description of the 62 dogs and horses which since 1890 have been instructed in number-speech by 40 teachers. —*M. E. Morse* (Catonsville, Md.)

5754. **Yudin, H. C., & Harlow, H. F. Comparative behavior of primates. V. Delayed reactions in primates in horizontal and vertical planes.** *J. Comp. Psychol.*, 1933, **16**, 143–148.—Four catarrhine monkeys were given delayed reaction tests with the containers under which the food was hidden placed in vertical or horizontal positions. This was to ascertain whether the climbing habits of the animals made them "vertically minded." The expected superiority of the vertical over the horizontal plane was not found. There was a slight, but probably not significant, difference in favor of reactions on the horizontal plane.—*N. L. Munn* (Pittsburgh).

[See also abstracts 5587, 5617, 5623, 5660, 5665, 5668, 5670, 5677, 5679, 5682, 5686, 5697, 5704, 5721, 5815.]

EVOLUTION AND HEREDITY

5755. **Campbell, C. G., Perkins, H. F., Little, C. C., Whitney, L. F., & Hunt, H. R. Replies to "Is eugenics dead?"** *J. Hered.*, 1933, **24**, 144–151.—Brief replies to the point of view expressed by Forbes (see VII: 5756).—*B. S. Burks* (California).

5756. **Forbes, A. W. Is eugenics dead?** *J. Hered.*, 1933, **24**, 143–144.—The author believes eugenics has made little progress for five years, and writes a communication which initiates a symposium on the subject (see VII: 5755).—*B. S. Burks* (California).

5757. **Hammerschlag, V. Die Heredopathia acustica und ihr Erbgang. Zugleich eine Erläuterung einfacherer mendelistischer Vorgänge.** (Hereditary pathological hearing and the mode of its inheritance. Likewise an explanation of simple Mendelian occurrences.) *Wien. med. Woch.*, 1932, **82**, 1019–1024.—(Courtesy *Bibliographia Eugenica*).

5758. **Jenkins, R. L. The prediction of the intelligence quotients of younger siblings.** *J. Genet. Psychol.*, 1933, **42**, 460–464.—By applying multiple

correlation and regression formulae to results of intelligence examinations it is found that correlations are slightly higher between adjacent siblings than between those more removed, and that little accuracy is gained in predicting intelligence of the next child by including more than one sibling in the computation. —*J. F. Dashiell* (North Carolina).

5759. **Jordan, A. M. Parental occupations and children's intelligence scores.** *J. Appl. Psychol.*, 1933, **17**, 103–119.—The higher the occupational level of the parents the higher the IQ of the children. "Poor environment is accumulative and causes smaller IQ's in successive years." Data are presented for about 1200 children in Grades I to VII on standardized group intelligence tests.—*R. S. Schultz* (Psychological Corporation).

5760. **Köhn, W. Psychologische Untersuchungen an Zwillingen und Geschwistern über die Vererbung der Kombinationsfähigkeit, der Intelligenz und der Phantasie.** (Psychological investigations of the inheritance of ability to do completion tests, of intelligence, and of fantasy in twins and siblings.) *Arch. f. d. ges. Psychol.*, 1933, **88**, 131–200.—The problem of the present study was to investigate the relative influence of heredity and environment upon mental characteristics by comparing the performance of 27 pairs of identical and 36 pairs of fraternal twins of the same sex on various individual and group tests, which measured perceptual and imaginal factors on both visual and verbal levels; little emphasis was placed upon manual behavior. The method for measuring the relative contributions of heredity and environment was the determination of the "self-differences," as worked out by Lenz and Verschuer, though with modifications. The results indicate that the reason for the concealment of hereditary characteristics is often not the environmental factors, but rather the complexity of the psychological reactions involved. Analysis of the results shows that the variability conditioned upon the environment varies between 37% and 58% with a mean at 43.2%, for the more important of the test results. The influence of heredity upon the content of mental processes (e.g., completing a story) is found to be considerable. It is concluded that for the intellectual processes heredity and environment are of equal significance. Imaginative and fantasy processes rest mainly upon environmental factors, apparently.—*D. E. Johannsen* (Skidmore).

5761. **LeGras, A. M. Psychose und Kriminalität bei Zwillingen.** (Psychosis and criminality in twins.) *Zsch. f. d. ges. Neur. u. Psychiat.*, 1933, **144**, 198–222. —(Courtesy *Bibliographia Eugenica*).

5762. **Lewis, A. Inheritance of mental disorders.** *Eug. Rev.*, 1933, **25**, 79–84.—The genetic transmission of only a few mental disorders is understood (Huntington's chorea, myoclonus epilepsy). Empirical assessments of the probability of transmission have been made, however, in a variety of disorders. Difficulties which beset research in this field are discussed. At Maudsley Hospital several studies have been undertaken of family resemblance and the incidence of mental disease.—*B. S. Burks* (California).

5763. **Link, M. Die Malerfamilie Tischbein.** (The Tischbein family of painters.) *Arch. f. Rassen- u. Gesellschbiol.*, 1933, **27**, 185–186.—A family which furnishes an exceptional example of the inheritance of marked endowment—in this case of artistic ability. —(Courtesy *Bibliographia Eugenica*).

5764. **Lund, S. E. T. Determining similarity of triplets and quadruplets.** *J. Hered.*, 1933, **24**, 195–197.—Rather similar methods developed by Aebly, by Verschuer, and by Dahlberg are discussed. The author adapts Verschuer's method by taking for the measure of twin difference $\sqrt{\frac{\Sigma(P.D.)^2}{N}}$ where $P.D.$ is the percentage difference of twins from their mean on one of a series of anthropometric measurements. The method is applied to several reported cases of triplets and quadruplets.—*B. S. Burks* (California).

5765. **Manson, J. S. Heredity and epilepsy.** *Brit. Med. J.*, 1932, i, 887.—In both of two families which have intermarried evidence indicates marked inheritance of epilepsy.—(Courtesy *Bibliographia Eugenica*).

5766. **Molinari, A. Un'indagine sulle motivazioni della diminuzione delle nascite.** (An inquiry into the motivations for the diminution of births.) *Metron*, 1932, **10**, 349–391.—A questionnaire was sent to the authorities in those 3046 Italian towns whose populations decreased between 1911 and 1921. In 1233 towns the replies indicated decreasing birth rate as the cause. Of these, 475 evinced reasons for the decreasing birth rate. Reasons most frequently alleged were economic distress and desire for a higher standard of living. Reduction of marriages due to these same reasons was given as an indirect cause. Other causes of birth reduction mentioned were physiological diminution of fecundity, emigration among those of child-bearing age, and the practice of birth control. When plains regions were compared with foothill and mountain regions, inverse correlation appeared between (1) mountainousness of region and (2) extent to which voluntary restriction and physiological infecundity were adduced to explain birth decrease.—*P. J. Rulon* (Harvard).

5767. **Muller, H. J. The dominance of economics over eugenics.** *Scient. Mo.*, 1933, **37**, 40–47.—Eugenics is corrupted by our present economic system and the impending radical changes in the latter are a prerequisite to a genuine, functioning eugenics.—*J. F. Dashiell* (North Carolina).

5768. **Newman, H. H. Mental and physical traits of identical twins reared apart.** *J. Hered.*, 1933, **24**, 209–214.—The author's Case VII of twins reared apart is the youngest pair yet studied. Of the two boys, age 13½ when examined, one was adopted when one month old by a truck farmer, the other when 14 months old by a well-to-do physician in a large city. Physical measurements, appearance, and friction ridge patterns gave strong evidence of monozygosity. Four mental tests showed only slight differences between

the twins, with a small advantage for the boy reared in the less cultured environment. IQ's on the Stanford-Binet were 106 and 105 respectively; corresponding EA's on the Stanford Achievement Test were 15-9 and 15-11. The Woodworth-Mathews, Pressey X-O, Downey Will-Temperament, and Kent-Rosanoff tests, together with laboratory observations, drew the author to the conclusion that the twins were "moderately different temperamentally," the twin growing up on a farm being "distinctly more aggressive and more positive in his reactions."—*B. S. Burks* (California).

5769. **Nissen, A. J. [Procreative power of patients with schizophrenia; justification of sterilization law in Norway on the basis thereof.]** *Nord. med. tidskr.*, 1932, 4, 929–934.—(Courtesy *Bibliographia Eugenica*).

5770. **Nyssen, R., Helsmoortel, J., & Thienpont, R. A propos de l'anosmie héréditaire familiale et congénitale.** (Concerning hereditary, familial and congenital anosmia.) *J. belge de neur. et de psychiat.*, 1933, 33, 422–426.—A résumé of findings on congenital and hereditary anosmia in several generations of the same family.—*H. W. Karn* (Clark).

5771. **Rasmussen, J. A. A contribution to the theory of quantitative character inheritance.** *Hereditas*, 1933, 18, 245–261.—(Courtesy *Bibliographia Eugenica*).

5772. **Saller, K. Die Fortpflanzungsstärke der Kriminellen.** (The energy of reproduction of criminals.) *Eugenik: Erblehre-Erbpflege*, 1933, 3, 60–63.—(Courtesy *Bibliographia Eugenica*).

5773. **Sanders, J. Zwillinge mit Epilepsie.** (Twins with epilepsy.) *Genetica*, 1933, 15, 67–88.—Study of four pairs of epileptic twins, three of them monozygotic. Discussion also of some cases from the literature and the bearing of these studies on the heredity of epilepsy.—(Courtesy *Bibliographia Eugenica*).

5774. **Seitzer, A. Geisteskrankheit, Aberglauben, induziertes Irresein in einer Familie.** (Mental disease, superstition, induced insanity in one family.) *Zsch. f. d. ges. Neur. u. Psychiat.*, 1933, 144, 267–275.—(Courtesy *Bibliographia Eugenica*).

5775. **Sontag, L. W., & Nelson, V. L. Monozygotic dichorionic triplets. Part II. Behavior of a set of identical triplets.** *J. Genet. Psychol.*, 1933, 42, 406–422.—The subjects of an earlier study (cf. *J. Hered.*, 1933) were observed under home conditions, between the ages of 12 and 42 months, with reference to the development of behavior. Concrete descriptions of some typical observations are furnished, and a few generalizations offered. H. was found to excel consistently in leadership and aggressiveness; J. was most obedient, timid, and sensitive to criticism; F. was not outstanding in either way. Differences in environment were: excessive attention to H. in first months on account of malnutrition, emotional alliance between J. and his mother since the first year. The observations are to be continued.—*J. F. Dashiell* (North Carolina).

5776. **Stocks, P., & Karn, M. N. A biometric investigation of twins and their brothers and sisters.** *Ann. Eug.*, 1933, 5, 1–55.—The following topics are considered: strength of grip, tests of sensory acuity, asymmetry in hand power and visual acuity, influence of twinning on the correlation between different physical characters, measures of mental ability, finger prints of twins and siblings.—(Courtesy *Bibliographia Eugenica*).

5777. **Usher, C. H. A pedigree showing mental defect in four generations.** *Ann. Eug.*, 1933, 5, 56–58.—(Courtesy *Bibliographia Eugenica*).

5778. **Woltereck, R. Grundzuge einer allgemeinen Biologie.** (Outline of general biology.) Stuttgart: Ferdinand Enke, 1932. Pp. 629. RM. 40.00.—Contains a section on the inheritance of mental traits.—*R. R. Willoughby* (Clark).

[See also abstracts 5840, 5841, 5877, 5892, 5896, 5903, 5932.]

SPECIAL MENTAL CONDITIONS

5779. **Ach, N. Ueber den Begriff des Unbewussten in der Psychologie der Gegenwart.** (The concept of the unconscious in contemporary psychology.) *Zsch. f. Psychol.*, 1933, 129, 223–245.—The method of interpretation (Freud et al.) can lead to no secure proof of the existence of unconscious mental processes. The method of experiment, however, when directed toward the discovery of the presence or absence of unconscious psychonomic (cf. G. E. Müller) factors in consciously observable processes, i.e. unconscious factors without the assumption of which the conscious data are unintelligible, leads inevitably to belief in their existence. Evidence for this can be found in the studies of determination, choice and "objection" (the process of referring psychical properties to an object). Bumke's rejection of the hypothesis of unconscious processes cannot, therefore, be accepted, although he is correct in his criticism of the rationalization of the unconscious.—*R. B. MacLeod* (Swarthmore).

5780. **Alexander, F. The relation of structural and instinctual conflicts.** *Psychoanal. Quar.*, 1933, 2, 181–207.—Instinctual processes are manifested in pairs of opposites, e.g., active-passive, thus affording a constant possibility of conflict. Structural conflict arises from rejection of instinctual strivings because of super-ego condemnation. Instinctual conflict arises from rejection of a striving because it is incompatible with another ego-acceptable one which determines the ego's attitude, as in passive homosexualism repressed by active masculine aspirations. There are three degrees of conflict, (1) external conflict based on external inhibitions, (2) structural conflict based on super-ego reactions, and (3) instinctual conflict based on incompatibility of coexistent opposed strivings. Differentiation of conflict type is important in prognosis and therapy. Also one type of conflict may serve to intensify another. The phases of masculine personality development, the instinctual conflicts of exhibitionism, and those arising between masculine ambitions and female passivity in criminals are discussed, with examples. The bisexual conflict in homosexuality and the conflict between retentive and

expulsive tendencies in anal erotism and the instinctual conflicts in the female ego are elaborated similarly. The author concludes that structural differentiation has a double effect, creating tension by restricting striving and by disturbing balance between conflicting tendencies, thereby altering quantitative distribution of narcissistic and object libido.—*M. H. Erickson* (Worcester State Hospital).

5781. **Baudouin, C. La psychologie de C.-G. Jung.** (The psychology of C. G. Jung.) *Rev. de psychol. appl. de l'est*, 1933, **3**, 58–72.—An exposition and evaluation of Jung's system of psychology and how it differs from those of Freud and Adler.—*P. Seckler* (Radcliffe).

5782. **Benda, C. E. Das Unbewusste und der Aufbau der geistigen Welt.** (The unconscious and the structure of the psychical world.) *Allg. Zsch. f. Psychiat.*, 1931, **4**, 7–19.—The author considers psychoanalysis not as a therapeutic agent, but primarily as a viewpoint for psychological investigation and interpretation of psychological results. The author reviews the ideas of numerous writers and presents the following conclusions: it is useful to regard the mental structure in terms of *Geist* and *Seele*, the first constituting the conscious part of the second; unconscious phenomena can become conscious, consciousness consisting of recognition of something experienced. All experienced phenomena are registered in the psyche, but are not necessarily conscious, although they can become so.—*M. G. Willoughby* (Clark).

5783. **Bergler, E. Unbewusste Motive im Verhalten Napoleons zu Talleyrand.** (Unconscious motives in the attitude of Napoleon toward Talleyrand.) *Psychoanal. Beweg.*, 1933, **5**, 319–369.—The life history of Napoleon is reviewed and his political relations to Talleyrand recalled, and comments are made on the relationship of both to women. The strong loyalty of Napoleon to France is examined in the light of his youthful antipathy as aroused by his strong Corsican affiliation. A search for motives is attempted from the psychoanalytical interpretation, and the author believes that Napoleon projected a youth's mother-love into a love of a mother country, and found in Talleyrand a symbol of the father, thus projecting his jealousy of the male parent upon his political rival. He calls attention to the strong inferiority feeling of Napoleon and his self-punishment attitude, the whole being a typical Oedipus-complex situation.—*A. B. Herrig* (Michigan Central State Teachers College).

5784. **Birnbaum, K. Charakterologie.** (Characterology.) *Fortsch. Neur. Psychiat. u. Grenzgeb.*, 1933, **5**, 275–287.—This article deals mainly with the structure of character and character types. The work of Ewald, Braun and Freud and their classifications in regard to anatomic, physiological and psychological differences are discussed rather fully. The contribution of O. Kant on the abnormalities of character is also considered. There is a short bibliography.—*D. S. Oberlin* (Newark, Del.)

5785. **Bonaparte, M. De l'élaboration et de la fonction de l'oeuvre littéraire.** (On the elaboration and function of literary work.) *Rev. fr. de psychanal.*, 1932, **5**, 649–683.—A psychoanalytic study of Edgar Allen Poe through his literary works.—*P. Blanchard* (Philadelphia Child Guidance Clinic).

5786. **Bond, F. B. The present status of psychic research and spiritualism.** *J. Amer. Soc. Psych. Res.*, 1933, **27**, 254–258.—The writer alleges that the revolt of "democracy" against ecclesiastical authority "holds good" in respect to science, and every man has a right to think for himself; nevertheless he should be guided by those who "are qualified to speak for psychical research." "A diabolic element" exists in some quarters, at first largely created by imagination but at last become a reality. All will be well with spiritualism *and* psychical research if the mystical and the intellectual elements "are kept in just and perfect balance of relation."—*W. F. Prince* (Boston).

5787. **Bonte, T. Ueber die Suggestibilität von Eidetikern und Nichteidetikern.** (The suggestibility of eidetic and non-eidetic children.) *Zsch. f. angew. Psychol.*, 1933, **44**, 161–192.—The suggestibility of eidetic children has been studied largely by means of pictures. The present study made use of a real situation, a slightly violent argument, prearranged and acted before the children. Under these conditions the suggestibility of both eidetics and non-eidetics was greatly increased, as indicated by the answers to a list of questions. On the whole, the eidetics were more suggestible, but they were also more reliable in unsuggestive questions. There was no correlation between suggestibility and intelligence. Suggestibility depends on the structure of the whole personality.—*K. F. Muensinger* (Colorado).

5788. **Braun, E. Die vitale Person.** (The vital personality.) In *Sammlung psychiatrischen und neurologischen Einzeldarstellungen, Bd. II.* Leipzig: G. Thieme, 1933. Pp. 79. Rm. 7.—The vital personality comprises the physical functions of the deepest psychic layers (instinct, mood, receptivity of stimuli, sleep). In the structure of the total personality, it lies on the border between body and mind, receiving impulses from both and spreading into both somatic and psychic functions. On the psychic side, its task is to supply the necessary vital force to the animal psychic and psychomotor functions. On the biological side, the vital personality is not limited to definitely circumscribed organs, systems, or cerebral areas; rather, the totality of all bodily functions in harmonious cooperation forms the biological foundation of the vital personality.—*P. Plaut* (Berlin).

5789. **Brill, A. A. Über Dichtung und orale Befriedigung.** (Poetry and oral gratification.) *Imago*, 1933, **19**, 145–167.—The importance of oral gratification from the earliest, nursing stage to thumb-sucking and later gratifications in smoking and gastronomy is stressed. Poetry is an expression of oral eroticism, a chewing and sucking of beautiful words and lines. Oral gratification in playing with words is traced in neurotics, psychotics, children, and primitive people; cases of neurosis and psychosis are cited. A parallel

is drawn between their illogical effusions and hypermodernistic poetry, such as Gertrude Stein's. Attention is called to Goethe's extraordinary appetite, and the alcoholism and drug addiction of Poe, Verlaine, Coleridge, and other poets. There are three kinds of poets: (1) those who reach the object-libidinal (genital) stage, in spite of oral fixations, and express themselves in comprehensible forms; (2) those who do not emerge at all from the oral stage, like Gertrude Stein; (3) poets who belong between these extremes. The latter are difficult to understand, but fill the reader with a strange mystical feeling—an echo of earliest infancy when the mouth contained the world and all gratification lay in a rhythmic sucking at the breast.—*J. W. Gassner* (New York City).

5790. **De Saussure, R. Le dogme de la famille irréprochable.** (The dogma of the irreproachable family.) *Rev. fr. de psychanal.*, 1932, **5**, 466–470.—Brief report of the unconscious mechanisms in the case of a 60-year-old woman, which caused her to distort the truth about herself and her family, insisting upon their exemplary character. Bringing up her children under this dogma, she was able to maintain a position of domination and authority and to repress her own impulses toward sexual irregularities.—*P. Blanchard* (Philadelphia Child Guidance Clinic).

5791. **Deutsch, F. Studies in pathogenesis.** *Psychoanal. Quar.*, 1933, **2**, 225–243.—The border-line between medicine and psychoanalysis is discussed in type problems ranging from birth to death. The repercussion of organic life upon the psychic and vice versa is illustrated repeatedly by examples from case histories. The need of the bioanalytical view and its role in validating psychophysical parallelism is elaborated. The value of the dual approach, both psychic and organic, in analytic as well as medical problems is discussed.—*M. H. Erickson* (Worcester State Hospital).

5792. **Ebbers, H. Beiträge zum Problem des Unbewussten und der psychischen Realität.** (Concerning the problem of the unconscious and of psychical reality.) *Arch. f. d. ges. Psychol.*, 1933, **87**, 69–128.—More fundamental than the distinction between consciousness and unconsciousness is the psychic reality in which both of these are included. Within this unified continuum, however, one finds a distinction between unconscious acts and conscious awareness of external things. Though there are five strata of unconsciousness, none is wholly untouched by consciousness. Hence in no case are they absolutely independent; indeed, it is only as a product of personal development that the unconscious comes into being. A *person* is the unity which these two comprise.—*W. D. Ellis* (Mass. State College).

5793. **Ehrenstein, W. Zur Herleitung der Typen aus der Phänomenologie und genetischen Psychologie.** (On the derivation of types from phenomenology and genetic psychology.) *Zsch. f. Psychol.*, 1933, **129**, 262–270.—Two fundamental, phenomenologically derived laws, that of the determination of partial processes by whole processes and that of figure and ground, are used as a basis for the definition of types. Consideration of the relative dominance of whole and part leads to the distinction between analytic and synthetic types, corresponding to Jaensch's disintegrated and integrated, and corresponding roughly to Kretschmer's three constitutional types are typically different relationships between figure and ground. Jaensch's ideoform and physicoform types must be derived genetically rather than phenomenologically.—*R. B. MacLeod* (Swarthmore).

5794. **Erickson, M. H. The investigation of a specific amnesia.** *Brit. J. Med. Psychol.*, 1933, **13**, 143–150.—The problem presented was that of recovering the content of a specific amnesia for the identity of a Christmas gift without the aid of supplementary information. Techniques of free association alone, free association and direct questioning in hypnosis, automatic writing, and crystal-gazing were tried without success. Finally, by means of a specious argument concerning the existence of a third level of consciousness and permission to use disguise mechanisms, the forgotten material was obtained, but in such guise that its true significance was not recognized. Then by means of dream activity a situation was created whereby the subject, without assuming the responsibility, could circumvent the repression. Following this a conflict state developed, characterized by the alternate repression of the two ideas, and ultimately resolved by the attachment of the affect to a related subject from which it was eventually removed. The motivation of the amnesia was not learned until several months later, when the subject disclosed its origin to lie in an emotional conflict over two men.—*M. H. Erickson* (Worcester State Hospital).

5795. **Feigenbaum, D. Bemerkungen zu den "libidinösen Typen."** (Remarks on the libido types.) *Imago*, 1933, No. 2, 260–261.—A contribution to Freud's theory of libidinal types. Freud distinguished three groups, erotic, narcissistic, and compulsive, also mixed types—erotic-compulsive, erotic-narcissistic, and narcissistic-compulsive. These may exist without manifesting neurosis, but a relation may exist between them and the form of neurosis they may assume in cases of neurotic illness. The erotic type represents the claims of the id; the narcissistic type, with dominance of interest in self-maintenance, shows predominance of the ego; the compulsive type, with its deference to conscience, exhibits domination of the super-ego. The three types are not phylogenetically of the same order, and represent a progression from erotic to narcissistic to compulsive, in accordance with the development from id to super-ego. The lowest pathoplastic power belongs to the erotic type, because it is rooted in the primitive id. Admixture in an "upward" direction would increase the pathoplastic power. Thus neurotic potentiality is increased when the dominant erotic combines with a narcissistic or compulsive type. An admixture "downwards" decreases the pathological potentiality; addition of an erotic type to a dominant narcissistic or compulsive type would decrease the morbid disposition. In the case of dominant compulsive type each combination with another type—erotic or

narcissistic—will decrease pathoplasticity.—*D. Feigenbaum* (New York City).

5796. **Fenichel, O. Outline of clinical psychoanalysis.** *Psychoanal. Quar.*, 1933, **2**, 260–308.—(Chapter VI, *Sexual Perversions.*) Differentiation is made between compulsion neuroses and perversions, both of which arise from the pregenital phase but differ in that perversions are ego-acceptable. Perversions are more than a continuance of infantile sexuality, representing also regression and a complex developmental anomaly in response to life experiences such as fixations, disappointments, and incomplete repressions. Bisexualism plays a part both as a constitutional and as a psychic factor. Most important are Oedipus and castration complexes in the development of perversions. Analysis of homosexualism reveals that it serves as an associative force in repressing other and more ego-objectionable things, such as Oedipus and castration anxieties, with consequent libido displacement. Formulations derived from the study of homosexualism are applicable to the whole group of perversions. Fetishism, transvestitism, and exhibitionism are all forms of castration denial. Voyeurism is related to the primal scene. The constitutional element is probably an augmented erogenicity of specific zones. Prognosis and therapy are restricted by the ego-acceptableness of the perversion, but are better than generally assumed in homosexuals. In combination with neuroses prognosis is better.—*M. H. Erickson* (Worcester State Hospital).

5797. **Freeman, H. Effect of "habituation" on blood pressure in schizophrenia.** *Arch. Neur. & Psychiat.*, 1933, **29**, 139–147.—A group of 50 patients, from 20 to 40 years of age, were studied under controlled conditions, in three periods, three months apart. The systolic and diastolic pressures were lower in the second than in the first period, the systolic pressure remained at approximately the lower level in the third period, while the diastolic pressure rose to an intermediate level. These results emphasize vascular hypotension as a characteristic of the schizophrenic psychosis.—*V. M. Jones* (Boston Psychopathic Hospital).

5798. **Frois-Wittman, J. Analyse d'un cas de troubles sexuels avec anxiété et symptômes hypocondriaques.** (Analysis of a case of sexual disturbances with anxiety and hypochondriac symptoms.) *Rev. fr. de psychanal.*, 1932, **5**, 501–553.—Detailed report of the analysis over a twelve-month period of a 35-year-old male patient with sexual impotence and hypochondriacal and other symptoms. The material produced by the patient and related to the symptoms is presented. There is a discussion of the changes in the transference during the course of the analysis. Also there is a discussion of errors in technique which were made because of the inexperience of the analyst and how these could be corrected through discussing the case with a more experienced person.—*P. Blanchard* (Philadelphia Child Guidance Clinic).

5799. **Glover, E. Zur Ätiologie der Sucht.** (The etiology of addiction.) *Int. Zsch. f. Psychoanal.*, 1933, **29**, 170–197.—The approach to drug addiction was profoundly influenced by the development of psychoanalytic concepts gained from experience with transference neuroses. Libidinal factors obscured the significance of sadism and the aggressive instincts. The concept of regression may be opposed by the view of a progression of psychopathological states. Obsessional mechanisms function comparatively well in remissions of melancholia, but obsessional neurosis, per se, is considered as a "severe regression," rather than a striking advance on the discomforts of an unconscious paranoid organization. The cure of an addiction may depend more on the reduction of an underlying paranoid layer than on the most careful analysis of the habit formation itself. The libidinal factors, including unconscious homosexuality, are non-specific. The introduction of the concepts of sadism and the super-ego are an advance, but not satisfactory when evaluated mainly in terms of genital development. Where deeper roots for the fixation of addiction are suggested, they are referred to phases of development when the psychic structure must be of a most rudimentary order, and therefore can be adequately valued as "constitutional" or "predisposing" without employing the term *fixation*. "The specific etiology of addiction is primitive without being prestructural. There is fixation to a transitional Oedipus system (polymorphonuclear complex), a system lying between the more primitive Oedipus nuclei that produce paranoid (or melancholic) anxieties and the nucleus that is responsible for later obsessional reactions. Its defensive function is to control sadistic charges, less violent than those associated with paranoia and more severe than met with in obsessional formations." Inquiry into the relationship between drug addiction and neurotic habits and social usages, in particular those belonging to an "ingestion" group, leads to the following formulation: "noxious addictions represent the reaction to a more acute state of anxiety; the destructive properties of drugs lend themselves to symbolic and actual expression of sadism; the restitutive and neutralizing effect however of noxious drugs cannot be excluded. In the benign addictions the substance still represents a vehicle of sadism, but less heavily charged and connected with less archaic fantasies. Reality has taken on a more friendly aspect; consequently non-injurious foods or their substitutes can function in these milder addictions; phallic elements stressed by drug addicts must be to some extent discounted; oral elements are important in the melancholic types; but in the average run of noxious addictions, the drug symbolizes excretory substances, which in turn, represent an almost uncontrollable form of excretory sadism."—*A. Slutsky* (New York City).

5800. **Hakebush, —, Blinkovski, —, & Foundillere, R. An attempt at a study of the development of personality with the aid of hypnosis.** *Trudi Inst. Psikhonevr. Kiev*, 1930, **2**, 236–272.—Starting from the viewpoint of Pavlov, who considers hypnosis as an internal inhibition, the authors have used it to obtain from their subjects reactions which corresponded to suggested ages. The present article deals with the reactions of a subject aged 34; in suggesting various

ages, only the appropriate behavior was obtained, the additions of experience since that age being inhibited. Thus upon suggesting that the subject had just been born, neonatal reflexes appeared; the motor development was studied by suggesting successive months up to two years. Drawings and associations at 3, 4, 5, 6, 7, and 8 years were appropriate, as were the mental ages on the Binet test and the Rorschach associations. The findings were to some extent verified by the conscious recollections of the subject.—*M. G. Willoughby* (Clark).

5801. **Hárnik, J. Die postnatale erste Entwicklungsstufe der Libido.** *Int. Zsch. f. Psychoanal.*, 1933, **29**, 147–151.—A post-natal phase of libido development is here postulated. It appears in the very first days of life and precedes the phase of oral libido organization. The respiratory apparatus and intestinal tract are the leading zones in this period, characterizing the phase as the "respiratory-intestinal" stage of libido organization. In support of this formulation Simmel's "intestinal cathexis" and the author's own previously published findings concerning asphyxiation anxiety are referred to. The fact of intestinal activity beginning immediately after birth is also cited in support. Bronchial asthma and mucous colitis considered psychogenetically are conversion phenomena on the basis of this earliest libido organization stage. Further weight is added by considerations drawn from bioanalysis, as elaborated by Ferenczi in the *Genitaltheorie*—that the respiratory-intestinal stage is the ontogenetic recapitulation of phylogenetic adjustment processes involving the respiratory and intestinal functions.—*A. Slutsky* (New York City).

5802. **Hayasaka, C. Psychoanalytische Studien über neurotische Angst. III. Mitteilung. Angstneurose.** (Psychoanalytic studies of neurotic anxiety. III. Anxiety neurosis.) *Arb. a. d. Psychiat. Inst. d. Tohoku Kais. Univ.*, 1933, **2**, 46–68.—The author is concerned with the possibility of separating anxiety neurosis and anxiety hysteria. He reports a case showing the typical symptom-complex of the former, but showing also a hysterical mechanism based on an unresolved Oedipus complex. This combination proves once more that a separation between the two types is impossible.—*M. E. Morse* (Catonsville, Md.)

5803. **Hirschfeld, M. Sexual pathology.** Newark: Julian Press, 1932. Pp. x + 350. $5.00.—A study of the abnormalities of the sexual functions, specifically sexual symbolism, hypereroticism, and impotence. The style is essentially anecdotal, the material being culled from clinical data gathered at the Berlin Institute for Sexual Science. There is no bibliography. —*O. L. Harvey* (Boston, Mass.)

5804. **Hitschmann, E. Kain- und Oedipus-Komplex in musikalischer Produktion.** (Cain- and Oedipus-complex in musical production.) *Psychoanal. Bewegung*, 1933, **5**, 370–372.—The author comments upon the musical talent of Weingarten, which showed itself early in life. His composition *Cain and Abel* he attributes to Weingarten's dislike of an older brother who had died, and whose life was persistently held before him as an example.—*A. B. Herrig* (Michigan Central State Teachers College).

5805. **Jekels, L. Das Problem der doppelten Motivgestaltung.** (The problem of the duplicated motive structure.) *Imago*, 1933, **19**, No. 1.—In dreams, in the neuroses, and in the drama, there prevails a tendency to express the central psychic constellation in two usually different guises. In a study of Shakespeare's *Macbeth* the central theme, "a bad son (Macbeth who kills Duncan [father]) is a bad father (Macbeth the king)", is repeated in the character of Macduff, who abandons his son in danger and following his murder is overcome by a sense of guilt. (Shakespeare abandoned his family and his only son died after the desertion.) It is shown that this second transcription is a frank expression of the dramatist's own sense of guilt, the "necessary condition by which the ego can come frankly to terms with it and is able to transmute it into the socially productive form of a sense of justice." (The son of the murdered Duncan ascends the throne.) In the neuroses the reproduction of the theme may appear as a recollection or may find motor reproduction ("acting out"), depending upon the severity of the super-ego and the degree of the ego's anxiety reaction. Therapy aims to strengthen the ego and resolve the resistance which underlies reproduction in action. The ego then can master its anxiety and be freed from the craving to suffer (gratified in acting out) so that it need not evade its conscience but can frankly face it and render account of itself. Dreams, neuroses, the drama, and psychoanalytic treatment all deal variously with the sense of guilt. In dreams and the neuroses the solution is unsuccessful and the personality is cleft asunder. In analysis and drama there is a successful conclusion and a unification of the personality. Examples from clinical data are given.—*R. Gosselin* (New York City).

5806. **Jelliffe, S. E. Glimpses of a Freudian Odyssey.** *Psychoanal. Quar.*, 1933, **2**, 318–329.—At the twenty-first anniversary of the New York Psychoanalytic Society Jelliffe briefly reviewed his own contacts, experiences, and participations in the development of the psychoanalytic movement, citing in particular those instances contributing most to his critical insights and understandings.—*M. H. Erickson* (Worcester State Hospital).

5807. **Jung, C. G. Modern man in search of a soul.** (Trans. by W. S. Dell & C. F. Baynes.) New York: Harcourt, Brace, 1933. Pp. ix + 282. $3.00.—(For citation of English edition see VII: 1877.) This volume is a series of 11 more or less independent chapters, all but one having been given as lectures. Jung indicates his point of view in respect to Freud and Adler; he feels that both approaches are true, but do not go far enough. Freud emphasizes the need for self-knowledge and understanding; Adler emphasizes the need for reeducation and the elimination of old, faulty habits. Both are right. Jung's own contribution, he feels, is the emphasis which he places upon the psyche, which is overlooked by both Freud and Adler in their emphasis upon instinctive physical drives. Jung feels that a clergyman, rather than a

physician, should be consulted by the neurotic. From his own experience he believes that the ultimate reason for neuroticism is lack of true religious outlook, and he urges an awakening of religious feeling.—*D. E. Johannsen* (Skidmore).

5808. **Kelsen, H. Die platonische Liebe.** (Platonic love.) *Imago*, 1933, **19**, 225–255.—In order to understand Plato's speculations as to the nature of good and evil it is necessary to consider the man Plato. Plato's life is fundamentally determined by the emotion of homosexual love. Because this type of love is looked upon with abhorrence by society, the homosexual is conscious of being "different from the others," feels painfully isolated, and develops special attitudes towards his fellow men. The development and characteristics of the homosexual Eros are described. What is known of Plato's person, personality, and life habits fits strikingly into this description. All references to women in his work are highly uncomplimentary. In the male principle he sees good; in the female, evil. The most ingenious arguments and the aid of mythology are invoked to justify and ennoble the love of man for man. The chief obstacle is the impossibility of overcoming the prejudices of society—and more importantly of Plato's own conscience—against its overt sexual manifestations. His position was the more difficult because most of his associates, including his beloved master Socrates, while they too approved of homosexual love, had, in addition, wives and children—an impossibility with Plato, who was completely homosexual. After the death of Socrates there is a period of pessimism during which in his writings Plato abandons temporarily the attempt to reconcile his Eros with the interests of the state. Finally, late in his life, the platonic dualism is unified into a world concept with emphasis upon the state and society.—*R. Gosselin* (New York City).

5809. **Kleitman, N., Cooperman, N. R., & Mullin, F. J. Studies on the physiology of sleep. IX. Motility and body temperature during sleep.** *Amer. J. Physiol.*, 1933, **105**, 574–584.—"New methods of studying motility during sleep are described. The time actually spent in movement during sleep is very small, about half-a-minute per hour. There is a gradual increase in frequency of movement during sleep, so that one moves considerably more during the later than during the earlier part of the night. A continuous recording of the rectal temperature of the sleeper synchronously with motility shows no definite connection between the temperature changes and motility. In individual sleepers there may be a seasonal variation in the temperature level and a parallel change in motility."—*C. Landis* (N. Y. Psychiatric Institute).

5810. **Knoll, W. Zur Psychologie der wissenschaftlichen Arbeit.** (The psychology of scientific work.) *Schweiz. med. Woch.*, 1931, **61**, 369–372.—Some reflections on the role of intuition and the subconscious in scientific discovery, on the suggestive influences that emanate from the cooperative efforts of a group of collaborating workers even without their knowledge, on the role of constitution and temperament, etc. However protean scientific production may appear to be, it is, according to the author, only the expansion of the total personality of the worker in his struggle for understanding.—*M. G. Willoughby* (Clark).

5811. **Kosawa, H. Alternierende Charakter- und Symptomneurose.** (Alternating character- and symptom-neurosis.) *Arb. a. d. Psychiat. Inst. d. Tohoku Kais. Univ.*, 1933, **2**, 1–20.—A student's unsolved infantile problems appeared in different transformations as alternating phases of acute neurosis and comparatively comfortable remissions dominated by an obsessive reaction-basis. In childhood he had two homes, his parents' and grandparents', and when denied in one, he turned to the other. The neurosis, precipitated by his father's prohibition of heterosexual relations, disappeared as soon as he escaped to the secondary school; only to be replaced, however, by asceticism and striving for perfection. Here friendly father-images replaced the threatening father, and the patient's narcissism was gratified by admission into a school of high standards. The sexual became identified with the forbidden and the cruel. Each return home caused an exacerbation of the neurosis.—*M. E. Morse* (Catonsville, Md.)

5812. **Kosawa, H. Magische Mimik bei einer Zwangsneurose.** (Magical mimicry in an obsessional neurosis.) *Arb. a. d. Psychiat. Inst. d. Tohoku Kais. Univ.*, 1933, **2**, 21–32.—A student, on falling in love, developed the obsession that he was being devoured by germs as a punishment for masturbation. He showed oral grimaces, which at first consisted in whispering certain words and spitting something out. Later the words were forgotten and replaced by a tickling sensation in the mouth. Regression was deeper than the manifest obsession neurosis, and progressive. Libido fixation had occurred at the transition from the anal to the phallic stage. His phantasies were anal-sadistic. The severe super-ego was determined largely by his own strong sadism projected on his father. Sexual activity was therefore not only disobedience but injury to his own narcissism. Advance being impossible, he regressed, after the first sexual activity, to the oral stage. At first he sought medical help, but later fought his delusions by magic words symbolic of his Oedipus conflict, and finally descended to the level of magic-hallucinatory omnipotence.—*M. E. Morse* (Catonsville, Md.)

5813. **Kosawa, H. Psychoanalyse einer sogenannten Neurasthenie.** (Psychoanalysis of a so-called neurasthenia.) *Arb. a. d. Psychiat. Inst. d. Tohoku Kais. Univ.*, 1933, **2**, 33–46.—A student complained of an offensive odor in the axillae, fatigue, and attacks of sweating, vomiting, and headache. He was fixed at the transition from the anal to the phallic stage. Both the odor and the attacks satisfied the urge to exhibitionism, genital and anal. The odor also expressed opposition to the mother, dating from training in cleanliness. The case was in reality one of conversion hysteria and organ neurosis.—*M. E. Morse* (Catonsville, Md.)

5814. **Kuypers, A. Het onbewuste in de nieuwere paedagogische psychologie.** (The unconscious in the newer pedagogical psychology.) Amsterdam: H. J. Paris, 1931. Pp. 220.—The author begins with a historical and theoretical treatment of the concept of the unconscious, showing the development of this concept from the time of Descartes, when it was purely philosophical, to the modern psychological theories. The various meanings which have been attached to the terms *conscious*, *consciousness*, and *unconscious* are fully discussed in relation to the organization of the mental life, the structure of the personality, etc. Two currents of contemporary psychology, the psychoanalysis of Freud and the individual psychology of Adler, are discussed with especial fulness. The latter is treated with greater sympathy, as having greater pedagogical significance. In the practical section of the book, various aspects of child life—play, fears, dreams, etc.—are described and interpreted from a pedagogic and therapeutic point of view.—*E. M. Pilpel* (New York City).

5815. **Levy-Suhl, M. Über die frühkindliche Sexualität des Menschen im Vergleich mit der Geschlechtsreife bei Säugetieren.** (On infantile sexuality in man as compared with puberty in mammals.) *Imago*, 1933, **19**, No. 1.—Although the purely psychological structures of psychoanalytic teaching are largely accepted even by their former chief objectors, the related biological sphere of psychoanalysis still calls forth undiminished contradiction. Special objection is made to Freud's discovery that children from three to six years of age have strong instinctual strivings, wishes and fantasies whose content is similar to the phenomena which in adult sexual pathology are called perversions. In an attempt to make this frequently disturbing statement more acceptable, support from pertinent biological sources is advanced. In order to explain the latency period between infantile sexual development and puberty, Freud drew upon the profound changes wrought upon plant and animal structures during the glacial epochs. Before these changes primitive forebears of *Homo sapiens* were sexually mature at a very early age in life—at approximately five years. According to this view, present infantile sexuality is a phylogenetic echo. Research in development gives many similar examples. It is found that what seems today to be the early appearance of sexual instincts in man is the rule with other large mammals when the duration of life and sexual maturity are compared. Thus the duration of life in man is given as 70 years and the onset of sexuality as at 5 years; the horse lives 30 years and is sexually mature at 1 year; dogs 15 to 20 years and mature at 9 to 10 months; etc. A table is given. Unexpected support to these views from another non-analytic source is given in the hormonal inhibition theory of the Dutch anatomist L. Bolk. According to him it must be assumed that the "primitive ancestors of modern human beings, the primitive Hominidae, were sexually mature in the fifth year of life." He believes that there are inhibiting hormones, specific for man, which retard procreation until puberty. He points out a marked discrepancy between the development of the germ plasm and the soma, unmistakably demonstrable in the female child, who is anatomically sexually mature at the age of 4 or 5. "There appears," he says, "a lull approximately in the fifth year; the function of conception cannot begin, for the soma will not for a long time be sufficiently grown. There must be present in the body a force which prevents the inception of this function."—*R. Gosselin* (New York City).

5816. **Lindworsky, J. Theoretische Ueberlegungen zur Frage des elementaren Hellsehens.** (Theoretical considerations on the question of elementary clairvoyance.) *Arch. f. d. ges. Psychol.*, 1933, **88**, 253–256.—The author defines "elementary clairvoyance" as the perception of an object under conditions which prevent the average person from perceiving it, e.g., the perception of a watch hidden under the clothing. On the basis of certain empirical examples, the author concludes that many bodies give off two kinds of stimuli—the main stimulus, such as normally stimulates human receptors, and accessory stimuli, which normally do not excite the receptors, but to which some individuals (clairvoyants) may be sensitive.—*D. E. Johannsen* (Skidmore).

5817. **Loewenstein, R. Un cas de jalousie pathologique.** (A case of pathological jealousy.) *Rev. fr. de psychanal.*, 1932, **5**, 554–585.—History of a case of pathological jealousy and report of the incomplete analysis of the patient, broken off at the end of a six-week period. There is a short discussion of the adaptation of techniques to the end of ameliorating the patient's condition in the short time available and of the resulting errors of technique.—*P. Blanchard* (Philadelphia Child Guidance Clinic).

5818. **Marbe, K. Ueber die vermeintliche Leistungssteigerung durch Recresal und Natrium bicarbonicum.** (The supposed increase in efficiency through Recresal and sodium bicarbonate.) *Arch. f. exper. Pathol. u. Pharmakol.*, 1932, **167**, 404–412.—It is shown that the immediate effect of Recresal and sodium bicarbonate is not different from that of a drink of water.—*K. F. Muenzinger* (Colorado).

5819. **Nachmansohn, M. Wesen und Theorie der Hypnose.** (The nature and theory of hypnosis.) *Allg. Zsch. f. Psychiat.*, 1931, **4**, 537–558.—In his explanation the author relies chiefly on the concept of Strauss, according to which the condition is characterized by the elimination of the self-feeling and the predominance of the group-feeling; it consists of an exceptional, artificially produced, reversible state, which cannot be identified with that of sleep, in spite of several points of resemblance. The nature of hypnosis seems incapable of explanation by the theories of Freud.—*M. G. Willoughby* (Clark).

5820. **Ohler, W. Wirkung kleiner Veronaldosen auf die Arbeitskurve am Ergographen.** (The effect of small doses of veronal on ergographic work curves.) *Zsch. f. ges. Neur. u. Psychiat.*, 1931, **136**, 299–310.—After having established the normal ergographic curve with the Mosso apparatus, the author administered 0.1 gm. of veronal to eight subjects and 0.15 gm. to a ninth. An ergographic curve was recorded half an

hour after the absorption of the drug, another half an hour after that, and so on during times varying from 1½ to 4½ hours. The results confirmed those previously secured: (1) a diminution in output and a drop in the summit of the curve; (2) a quick fatigue. The subjects, however, do not manifest fatigue either in their behavior or in their reports, although the ergographic results are clearly positive.—*M. G. Willoughby* (Clark).

5821. **Pallister, H. The negative or withdrawal attitude: a study in personality organization.** *Arch. of Psychol.*, 1933, No. 151. Pp. 56.—The present research is concerned with the investigation of what has been called the negative or withdrawal attitude. Does the tendency to withdraw from direct contact with the environment constitute a personality trait? If so, how does it exhibit itself in the life history and present status of the individual? 209 women students in Barnard College were subjects. Leck's Individuality Record, a short inventory, a vocabulary test, ten rating scales, and physical measures were the testing materials. Statistical analysis of the results indicates that a general factor is operative in the response of approach or withdrawal in different situations. The numerical value of the reliability coefficient is .94. Choice of occupation shows no clear-cut relationship to withdrawal attitude. Similarity or disparity in parents' educational status is unrelated to withdrawal attitude in daughters. Eldest children have the highest scores, only children the lowest.—*E. M. Achilles* (Columbia).

5822. **Piddington, R. The psychology of laughter. A study in social adaptation.** London: Figurehead, 1933. Pp. 227.—The book is chiefly notable for its summaries and criticisms of all the important theories of laughter from Plato and Aristotle to Freud, McDougall, and other contemporaries. The author's own theory is briefly as follows: In infants, laughter is aroused chiefly by pleasant stimuli which satisfy a need, and its primary function is to notify the mother of the well-being and contentment of her baby. In slightly older children, laughter occurs chiefly in those play situations that exercise the instinctive activities of pugnacity and escape—activities which sometimes change suddenly from play to a serious struggle in which one or both participants may be hurt. Laughter in such situations shows the playmate that the struggle is still "all in fun" and he may safely continue it. Cessation of laughter notifies him that the play mood is gone and the play had better cease. It is with great difficulty that the author bridges the gap between laughter in such situations and the laughter of adults at "the ludicrous." He endeavors to show that the ludicrous, whether it be a simple pun, a practical joke, or a subtle comedy, always involves conflicting social evaluations. Weeping, generally regarded as the opposite of laughter, is primarily a reflex protecting the eyes from noxious stimuli. Young children cry to attract their parents' attention when they want something. Prolonged screaming gorges the blood vessels of the eyes and lachrymal glands and leads incidentally to secretion of tears. Thus weeping becomes a conditioned reflex associated with crying. Weeping is often a more effective means for a child to attain his ends than screaming, and the weeping persists long after the child has learned to inhibit his outcries. It becomes the normal human expression of distress. Laughter, the normal expression of euphoria, serves to indicate complete satisfaction with things as they are. Without it, the discovery that in a given situation two or more conflicting social evaluations were equally applicable might seem to demand immediate reorganization of the whole scheme of social values; but to laugh is to deny the seriousness of the discrepancy. Thus laughter at the ludicrous serves to preserve social evaluations even though they come into mutual conflict.—*M. F. Martin* (West Springfield, Mass.)

5823. **Radó, S. In memoriam: Sándor Ferenczi, 1873–1933.** *Psychoanal. Quar.*, 1933, **2**, 356–358.—Sandor Ferenczi died of pernicious anemia May 22, 1933. His contributions to psychoanalysis fill several volumes. His first publication, *Actual- and Psychoneuroses*, appeared in 1908, followed in 1909 by *Introjection and Transference*, containing an analytic theory still valid. His masterpiece, *Versuch einer Genitaltheorie*, appeared in 1924 and constitutes a challenge to the future of analytic development. In addition he published several hundred scientific articles, besides spending much effort in teaching and lecturing activities. He helped found the International Psychoanalytic Association, was the leader of the Hungarian Psychoanalytic Society for the last twenty years, and was the founder and co-editor of the *Internationale Zeitschrift für Psychoanalyse.*—*M. H. Erickson* (Worcester State Hospital).

5824. **Rushton, W. A. H. Lapicque's theory of curarization.** *J. Physiol.*, 1933, **77**, 337–364.—A critical and experimental study of Lapicque's theory of curarization is made. When certain precautions are observed, curare is found to paralyze the muscle without affecting the strength-duration curve in any way. In no case was the curarization by one drug removed by the application of another. It is shown that Lapicque's observed excitability change upon curarization is due to transfer of excitation from nerve to muscle. The author considers the experiments performed by him as positive evidence against Lapicque's theory of curarization.—*M. A. Rubin* (Clark).

5825. **Serog, M. Analyse eines Homosexuellen. Ein Beitrag zum Problem der Homosexualität und ihrer psychotherapeutischen Beeinflussbarkeit.** (The analysis of a homosexual. A contribution to the problem of homosexuality and its modifiability by psychotherapy.) *Allg. Zsch. f. Psychiat.*, 1931, **4**, 750–771.—The report of the psychoanalysis of a young homosexual man of 28. The analysis had the effect of changing the overt homosexuality to a latent form, thus making it possible for the subject to achieve normal sexual relationships.—*M. G. Willoughby* (Clark).

5826. **Simmel, E. Zur Psychologie der Geschlechter.** (Psychology of the sexes.) *Psychoanal. Be-*

wegung, 1933, **5**, 285–301.—Simmel gives two radio talks on the topic of sex variation. He holds that there are specific sex differences; he believes they are due not to heredity but to social repressions in the developmental period. He seeks in the psychoanalytical field for hypotheses explaining the dependence of women. He sees in man the more primitive type dominated by the reality principle (*Realitätsprinzip*); in woman, the affective principle (*Lustprinzip*) being dominant, a recognized superior development occurs. He explains how this develops through the birth experience. Also, early in the girl's life she becomes conditioned to inferiority feelings which she carries through life.—*A. B. Herrig* (Michigan Central State Teachers College).

5827. **Wälder, R. The psychoanalytic theory of play.** *Psychoanal. Quar.*, 1933, **2**, 208–224.—Play activity is the child's method of elaborating experience as a process of assimilation. The pleasure principle is apparent in play, but this does not explain play of an unpleasant character, which necessitates reference to the principle of the repetition compulsion. Bühler's theory of "functional pleasure" from performance and "gratification pleasure" from success is applicable in part. Essentially play is a means of assimilating in diluted form experiences too large to grasp at once, and is characterized by a swing from passive to active roles. It also has teleological functions. Additionally it serves to liberate the child from both reality and the super-ego. Parallels of play are fantasies and day-dreams, with fantasies about real objects constituting actual play.—*M. H. Erickson* (Worcester State Hospital).

5828. **Watson, G. Character and personality tests.** *Psychol. Bull.*, 1933, **30**, 467–487.—After exclusion of physiological, clinical, and other border-line studies, in the two years past some three hundred contributions have appeared in this field, of which two-thirds are here reported. These show interest in ratings, symptom descriptions (as introversion-extroversion, inferiority, ascendance-submission), moral opinion and conduct, short behavior observations, social attitudes and opinions, emotional control, temperament, etc. An unpromising feature of the present situation is the large use of self-description blanks for symptoms and opinions; while a promising feature is the increasing use of test situations and objective observations of conduct.—*J. F. Dashiell* (North Carolina).

5829. **Weiss, E. A recovery from the fear of blushing.** *Psychoanal. Quar.*, 1933, **2**, 309–314.—This clinical communication discusses the analysis of an erythrophobia originating in early childhood castration fears, and illustrates the absolute necessity in therapeutic analyses of recovering repressed infantile and childhood memories.—*M. H. Erickson* (Worcester State Hospital).

5830. **Wertham, F., & Bleuler, M. Inconstancy of the formal structure of the personality. Experimental study of the influence of mescaline on the Rorschach test.** *Arch. Neur. & Psychiat.*, 1932, **28**, 52–70.—A great difference was shown in the reactions of the same subject to the Rorschach test under the influence of mescaline and under normal circumstances. "Of the two Rorschach tests, the one obtained under mescaline, contrary to expectation, corresponded closely to the personality as known in life. The test obtained in normal circumstances, while agreeing in some points, gave a diametrically opposed picture of all important qualities."—*V. M. Jones* (Boston Psychopathic Hospital).

5831. **White, S. E. The process of mental mediumship.** *J. Amer. Soc. Psych. Res.*, 1933, **27**, 283–287.—The novelist outlines the development of "mediumship" in his own person. Interested in psychic research, he long doubted his own capacity. But one day he experimented and became conscious of "tingling 'currents' of force." Later he was able to attain a partly dissociated state, in which he enunciated sentences "in an explosive, propulsive fashion" of which he was not aware. In this state he is partly conscious of what he says, has only confused recollection of it, but can usually correct errors in the record (after the fashion of post-hypnotic suggestion?). Two professed communicators speak, "Joe," the son of a friend, and an anonymous personality who speaks broad Scottish, though the author has always disliked the notion of spirits who talk in dialect. He does not say he produces anything evidential.—*W. F. Prince* (Boston).

5832. **Wittels, F. Nachtrag zu meinem Buche "Sigmund Freud" (1923).** (Sequel to my book *Sigmund Freud*, 1923.) *Psychoanal. Beweg.*, 1933, **5**, 302–318.—In this article Wittels recalls the errors of judgment made in his book on Sigmund Freud, and the injustice he did him and his work. He corrects these in the light of his later thinking. Among them he finds that Freud has not the Jehovah-complex, the conceit he attributed to him. On the contrary, he is modest to a high degree, always doubtful of his findings. The Freudian analytical school is enlisting a widespread interest in a new scientific field. Freud is the author and not the plagiarist, as he had represented him. The Freudian contribution is not metaphysical in the sense of being mystical, but is highly realistic and scientific. The *Ich* idea and the *Es* idea are re-evaluated by the author and his later concept of the castration-complex explained. The whole is a frank statement of a change of attitude toward Freud.—*A. B. Herrig* (Michigan Central State Teachers College).

5833. **Wolff, W. Experimentelle Persönlichkeitsdiagnostik.** (The experimental diagnostic of personality.) *Allg. Zsch. f. Psychiat.*, 1931, **4**, 600–622; 659–685; 724–749.—The author criticizes the methods used in psychotechnics because, by studying each mental function singly, they overlook the fundamental principle of the unity of the whole personality, thereby creating artificial conditions and getting inexact results. In the first part of the article the author makes a report on a study of memory considered in relation to other dynamic factors of the personality. After having listened to the reading of a short story, eight subjects were asked the story at

the end of from three to eight weeks. The author found that the memories became more and more accurate with the passing of time, providing the story had particular interest for the subject. A study of omissions, errors and words often repeated showed that the omitted words were those most often associated with disagreeable memories. In the second part of the article the author describes a method of character evaluation by a study of different forms of expression—photographic profile, form of the hands, voice, walking, writing, etc. The correlation between the evaluations of different persons is satisfactory, according to the author. It is useful to compare the character evaluation by this method with the direct observation of the subject.—*M. G. Willoughby* (Clark).

5834. **Yamamura, M. Psychoanalytische Studien über Erythrophobie.** (Psychoanalytic studies of erythrophobia.) *Arb. a. d. Psychiat. Inst. d. Tohoku Kais. Univ.*, 1933, **2**, 69–102.—Analysis of an erythrophobia demonstrated the mechanism of "displacement from below upwards," i.e., genitalization in its conflict with the ego and super-ego found an outlet in reddening of the face. This was also a partial satisfaction of the exhibitionistic tendency, and the accompanying shame and anxiety were the super-ego's protest. Erythrophobia was thus a compromise-formation against conflict in the phallic stage, and an incomplete conversion hysteria. As the anxiety had an obsessional character, erythrophobia may also be considered a symptom of obsessional neurosis. It is, however, neither a pure hysterical nor an obsessional-neurotic symptom, but a psychic mechanism between the two.—*M. E. Morse* (Catonsville, Md.)

[See also abstracts 5646, 5657, 5661, 5670, 5682, 5714, 5715, 5861, 5865, 5925, 5971, 5978, 5983, 6015, 6024, 6028, 6031, 6036, 6086, 6126.]

NERVOUS AND MENTAL DISORDERS

5835. **Abély, X., Abély, P., Couléon, —, & Trillot, —. Manie intermittente et hyperplasie hypophysaire.** (Intermittent mania and hypophyseal hyperplasia.) *Ann. méd.-psychol.*, 1933, **91**, 229–233.—A female patient who had had attacks of mania over a period of twelve years died in one of these attacks from an intercurrent disease. The only abnormality found at autopsy, to be associated with the nervous system, was an enlarged hypophysis. It showed congestion and hyperplasia, with many chromophile cells, indicating hyperactivity of the gland.—*M. B. Mitchell* (New Hampshire State Hospital).

5836. **Allen, C. Some experiments in reinforcing mental analysis in cases of psychosis.** *Brit. J. Med. Psychol.*, 1933, **13**, 151–164.—Allen's experiments indicate how autosuggestion can be used to release psychotics' repressions with safety and some certainty. In the past, it has been unsuccessful because it has been directed to increasing the repression. He reports 4 paranoid patients in whom he reinforced partial analysis with suggestion by having them repeat, while going to sleep, statements embodying their conflicts. Definite results were obtained in the production of dreams and variation of symptoms, either toward improvement or exacerbation. The method is valuable both for research and treatment, but should not be applied indiscriminately. To use it to increase the repression of a major conflict or directly to reinforce an identification is dangerous. It should also be limited to patients who are unsuitable for analysis.—*M. E. Morse* (Catonsville, Md.)

5837. **Alvarez, J. C. Una colonia para alienados en la Provincia de Santa Fe.** (A colony for abnormals in the Province of Santa Fe.) *Bol. inst. psiquiat.*, 1933, **4**, 141–143.—An account of the factors underlying the necessity of a psychiatric hospital in this section of Argentina.—*R. M. Bellows* (Ohio State).

5838. **[Anon.] The 1933 symposium. Certain aspects of treatment in psychiatric work with children.** *Amer. J. Orthopsychiat.*, 1933, **3**, 310–336.—Three questions are proposed to members of the panel for discussion: (1) the influences which the therapist introduces into his relations with the patient to produce a therapeutic situation; (2) results of therapy; (3) relation between maturation and therapy. Simple suggestion, release and abreaction, transference, understanding, educational advice, psychoanalysis, insight, direct gratification, and play therapy are discussed.—*H. Peak* (Yale).

5839. **Baonville, H., Ley, J., & Titeca, J. Deux cas de tumeurs frontales avec troubles psychiques prédominants.** (Two cases of frontal tumors with predominant psychical disturbances.) *J. belge de neur. et de psychiat.*, 1933, **33**, 481–496.—Case studies of two male patients, 51 and 31 years of age, with cerebral tumors. A pseudo-demential syndrome characterized by torpor and intellectual obnubilation, temporal and spatial disorientation, disorders of attention, emotional indifference, and reduced activity prevailed in both cases. The diagnosis of cerebral tumor in each case was confirmed by later evidence which revealed an intracranial hypertension and bilateral papillary stasis. The localization of the tumors in the frontal lobes resulted chiefly from the precociousness and seriousness of the mental disorders. —*H. W. Karn* (Clark).

5840. **Berlit, —. Die eugenische Aufklärungsarbeit der Hilfsvereine für Geisteskranke.** (Eugenic educational work of the societies for the aid of mental patients.) *Zsch. f. psych. Hygiene*, 1933, **6**, 114–124. —Berlit describes the channels through which these societies may bring, and to some extent actually are bringing eugenic information and advice to the general public and professional workers. He outlines reading courses for lay members and physicians, and discusses the special preparation for this teaching. The chief means which he advocates are articles in newspapers and magazines and literature for distribution; talks before parent-teacher associations and students in secondary schools; cooperation with the Council of Social and Public Health Agencies, clinics for matrimonial counsel and agencies caring for alcoholics; and courses and clinics for theological students. Of great eugenic importance also is the

stimulation, especially among the educated, of interest in their own family traditions and genealogy. —*M. E. Morse* (Catonsville, Md.)

5841. **Berman, H. H. Order of birth in manic-depressive reactions.** *Psychiat. Quar.*, 1933, **7**, 430–435.—This article is based on a study of 100 case records of the St. Lawrence State Hospital in which a diagnosis of manic-depressive psychosis had been made. While the number of cases is small, the frequency of development of manic-depressive psychosis according to the ordinal position of the family is relatively higher in the first-born than in any other ordinal position. 22 cases were among those last born in the family. The reaction to the birth of a younger member in a family frequently appears to be a predisposing factor. The author states that early childhood disorders should be treated as manic-depressive reactions in the hope of averting frank attacks of psychosis in later life.—*E. T. Burr* (Vocational Adjustment Bureau).

5842. **Binswanger, L. Ueber Ideenflucht.** (Flight of ideas.) Zürich: Orell Füssli, 1933. Pp. 214. Fr. S. 10.—The above work proceeds from a psychiatric-clinical theme and is written with a psychiatric-clinical purpose. In following this purpose, it differs to a great extent from psychiatric-clinical method, but only in order to return to that theme its originality, freedom, and fruitfulness, exactly as the clinical viewpoint itself would do if it could escape from the confines of clinical consideration proper and view the entire theme of mankind. This means, however, that the subject matter embraced by our theme should be rid of the solely "value-free" moral judgment and purely negative biological and psychological evaluations of the present partly moralizing, partly objective-physical psychiatry, and should be conceived as one specific existential possibility.—*L. Binswanger* (Kreuzlingen, Switzerland).

5843. **Borel, A., & Cénac, M. L'obsession.** (Obsession.) *Rev. fr. de psychanal.*, 1932, **5**, 586–648.—A general, theoretical discussion of the nature of obsessions, the mechanisms underlying obsessional symptoms as revealed by psychoanalytic studies, and consideration of constitutional factors.—*P. Blanchard* (Philadelphia Child Guidance Clinic).

5844. **Brain, W. R. Diseases of the nervous system.** New York: Oxford Press, 1933. Pp. 915. $8.75.—*R. R. Willoughby* (Clark).

5845. **Brew, M. F. Precipitating factors in manic-depressive psychosis.** *Psychiat. Quar.*, 1933, **7**, 401–410.—A study of 25 cases by the assistant director of the Syracuse Psychopathic Hospital. The material for this study was selected on the basis of the relative completeness of the history and the accessibility of the subject. Analytical interviews brought out abundant facts not even hinted at in the anamnesis. Worry is the prime factor voiced in the analytical conferences. The precipitating causes resolved themselves into three groups: a feeling of insecurity based upon either financial strain, social disapproval, physical handicaps, or fear of family insanity; in the second group, a stirring up of conflicts, either by a particular situation, or a lowered resistance which makes suppression difficult, the conflict then being associated with a sense of guilt; the third group revealed self-pity resulting from thwarted self-expression. It is concluded that these precipitating factors are similar to those in any other mental illness. The form, however, which the psychosis takes must depend upon some endogenous factor of which the determinant is yet to be established.—*E. T. Burr* (Vocational Adjustment Bureau).

5846. **Brown, M. W. Organizing a community for mental hygiene.** *Ment. Hygiene*, 1933, **17**, 424–450.—This is the report of Subcommittee V, the committee on mental hygiene, of the Rochester council of social agencies, and is included in the volume published by the council entitled *Some Facts, Policies, and Recommendations Pertaining to Social Agencies in Rochester, New York.* Different sections of the report deal with the family, the adjustment of the individual, relief administration, religion, and various community problems. The committee offers definite recommendations.—*O. L. Harvey* (Boston, Mass.).

5847. **Cannon, A., & Hayes, E. D. T. The principles and practice of psychiatry.** London: Heinemann, 1932. Pp. xvii + 437. 25/-.—The authors propose to present in concise form the most recent knowledge obtainable in psychiatry. Practically every phase of the subject is treated in the sixteen chapters of the book. An appendix and an index are given, but no bibliography.—*S. H. Newman* (Clark).

5848. **Capgras, J., Joaki, E., & Ellenberger, —. Psychose présénile. Négations systématiques et érotomanie.** (Presenile psychosis. Systematic negations and erotomania.) *Ann. méd.-psychol.*, 1933, **91**, 209–214.—An unmarried woman aged 58 became psychotic at the beginning of menopause. At first she was very depressed, hypochondriacal, and self-accusatory. She developed the delusions that dead members of her family were alive. Then she extended her negations to all past events in her life and to all events such as the wars of 1870 and 1914. After about 10 months of depression, she became euphoric, hyperactive, and thought she was engaged to one of the doctors. Her systematic negation included the denial of this doctor's wife and children.—*M. B. Mitchell* (New Hampshire State Hospital).

5849. **Carpenter, W. S. Mental-hygiene clinics in New Jersey.** *Ment. Hygiene*, 1933, **17**, 374–379.—A brief survey, with a recommendation that cost of maintenance of clinics should be divided between state and local community.—*O. L. Harvey* (Boston, Mass.)

5850. **Claude, H., & Masquin, P. L'examen du fond mental des paralytiques généraux par la méthode des tests.** (Examination of the mental basis of general paralysis by the test method.) *Ann. méd.-psychol.*, 1933, **91**, 71–74.—A summary and critical discussion is given of an article to appear in a later issue of this journal.—*M. B. Mitchell* (New Hampshire State Hospital).

5851. **Claude, H., & Masquin, P. L'examen du fonds mental des paralytiques généraux par la**

méthode des tests. (The examination of the mental condition of general paretics by test methods.) *Ann. méd.-psychol.*, 1933, **91**, 173–184.—Since the Binet-Simon intelligence test seemed inadequate for testing adult paretics, other tests have been devised. They are given before and after treatment to determine improvement and possibility of the patient's returning to work. The tests have been selected with a view to testing attention, memory, judgment and reasoning, imagination, and observation, rather than to determine a mental level.—*M. B. Mitchell* (New Hampshire State Hospital).

5852. **Costedoat, A. Les troubles psychiques de l'ergotisme épidémique.** (The psychical disturbances of epidemic ergotism.) *Ann. méd.-psychol.*, 1933, **91**, 185–195.—The epidemics of ergotism caused by eating bread made from infected crops of rye, wheat or barley have about disappeared in Europe during the present century. Two forms were common, the gangrenous form, found most frequently in France, and the convulsive form with its mental complications, found more frequently in Germany and Russia. Post-mortem examinations revealed endocarditis, thrombosis of the small vessels, sclerosis of the posterior cords of the medulla, and degeneration of the cells of the cerebral cortex. The mental symptoms usually consisted of acute confusion with delirium, anxiety, agitation or depression. Sometimes there were hallucinations and occasionally a manic attack with mental clearness. The symptoms most frequently followed the convulsions.—*M. B. Mitchell* (New Hampshire State Hospital).

5853. **Cronin, H. J. Pellagra with ocular disturbance and psychosis.** *J. Nerv. & Ment. Dis.*, 1933, **78**, 35–44.—A summary of a case in which, although pellagra precipitated the psychosis, the psychiatric reactions were identical in content with previous reactions of this patient to toxic bodies.—*C. R. Atwell* (Boston Psychopathic Hospital).

5854. **Dagnelie, J. Syndrome de l'angle ponto-cérébelleux.** (Syndrome of the ponto-cerebellar angle.) *J. belge de neur. et de psychiat.*, 1933, **33**, 352–356.—A case study of a female of 41 years of age who exhibited a syndrome of the ponto-cerebellar angle. The case history showed that for two years prior to internment the patient had experienced disturbances of hearing, particularly in the left ear, together with difficulty in maintaining equilibrium. This condition was followed by a facial paralysis on the left side. Clinical examination revealed progressive injury of the 5th, 7th, and 8th left cranial nerves. The author considers several possible diagnoses, but finally concludes the case to be an example of neurinoma of the acoustic nerve.—*H. W. Karn* (Clark).

5855. **De Sanctis, S. Prevenire il nervosismo.** (On the prevention of nervousness.) *Politica sociale*, 1933, p. 11.—According to the author we can follow prophylactic principles with regard to the bases of nervousness; that is, pain and asthenia. The first of these principles is the knowledge that each individual should have of himself, his value, and his limitations. The author has formerly observed that such a knowledge can augment the power and productivity of work. All individuals should not only know their own attitudes, but also their sensibilities, their resistance to pain, their suggestibility, etc., in order to be able to set up the necessary defenses in life. As regards asthenia, the author believes that suspected asthenic subjects should submit to a work test, because the psychodynamic curve is a valuable check on the clinical and morphological examination, and because we can thus establish a type of asthenic work which could be used according to the subject's particular condition, with profit to the individual and to society. Last, the author stresses the importance of pedagogical factors, social assistance, character education, and the cultivation of hope, courage and happiness; and the moral advantages of assistance, not only for those who receive care, but for those who render it.—*R. Calabresi* (Rome).

5856. **De Sanctis, C., & Cacchione, A. L'idiozia xerodermica.** (Xerodermic idiocy.) *Riv. sper. fren.*, 1932, **56**, 269–292.—The author describes a familial disease the essential characteristics of which are idiocy, speech disturbance, pigmented xeroderma and dysendocriniasis (testicular aplasia); it is a matter of a well-defined clinical entity, which however is not yet described in the neuropsychiatry of children. Dermatologists have mentioned the simultaneous occurrence of this phenomenon with other hereditary diseases and degenerative manifestations. As not all cases of sebaceous edema and of Recklinghausen's disease are tuberous sclerosis, so not all cases of xeroderma are confined to xerodermic idiots; the possibility of "formes frustes" of course exists. Xerodermic idiocy with complete syndrome is a nosological picture of greatest significance. It may be considered as belonging to the group of tuberous scleroses; both are biocerebropathies, hereditary and familial; their pathogenesis depends upon a constitutional anomaly which becomes intensified through acquired conditions (syphilis). In xerodermic idiocy the outer germ layer is attacked, and a weakness results which is comparable to senescence; with these are also comparable the histological changes of the skin, as well as those which the nervous system shows.—*R. Calabresi* (Rome).

5857. **Doll, E. A. Mental retardation as a result of birth injury.** *J. Genet. Psychol.*, 1933, **42**, 481–483.—Of 44 cases of mental deficiency studied over four years, some 10% have been diagnosed as definitely, probably, or possibly birth-injured. This is the largest single etiological category of mental deficiency exclusive of heredity.—*J. F. Dashiell* (North Carolina).

5858. **Evrard, E. A propos d'un état paranoïde.** (Concerning a paranoid state.) *J. belge de neur. et de psychiat.*, 1933, **33**, 278–290.—A case study of a female patient of 37 years of age whose behavior was characterized by an unsystematized delirious activity of an incoherent sort, pronounced dissociation of the schizophrenic type, and marked reduction of activity. These symptoms led to a diagnosis of schizophrenic paranoid psychosis.—*H. W. Karn* (Clark).

5859. **Ewald, G. Schizophrenie.** (Schizophrenia.) *Fortsch. Neur. Psychiat. u. Grenzgeb.*, 1933, **5**, 321–341.—This is the first part of a survey of recent work dealing with schizophrenia. The conclusion is to appear in the next issue of the journal. This part is concerned mainly with a volume lately published by the Heidelberg Clinic after years of intensive work. The book is a collaboration. The introductory chapter is by Gruhle, and takes the form of an historical survey of the development of the study of schizophrenia. A statistical section is contributed by Meyer-Gross, and is concerned with frequency of schizophrenia, and the relation of race, climate and sex to the disease. Burger-Prinz contributes a chapter dealing with bodily constitution. Many other subjects, such as schizophrenia in children, clinical abnormalities, and the course of schizophrenia are discussed. The article appears to be a fairly complete résumé of the book.—*D. S. Oberlin* (Newark, Del.)

5860. **Fay, T. Mental deterioration and deficiency. Its consideration from the standpoint of certain cerebral vascular volume relations.** *Amer. J. Psychiat.*, 1933, **12**, 893–928.—The author presents various groups of acute and subacute cerebral problems associated with mental deterioration. Dehydration was found associated with the arresting of the mental deterioration or with actual improvement in many cases. The author believes that "the volume relations between blood, spinal fluid or mass lesions are of profound significance, . . . and the procedure of dehydration directed toward the removal of the excess volume of spinal fluid so as to permit replacement by an increase in circulating blood, offers a means of treatment in the acute as well as in the chronic mentally deteriorated groups."—*N. Goldman* (Boston Psychopathic Hospital).

5861. **Finckh, J. Die nervöse Schlaflosigkeit und ihre Behandlung.** (Nervous insomnia and its treatment.) Munich: Verl. d. Aerztl. Rundschau, 1933. Pp. 50. RM. 1.20.—*R. R. Willoughby* (Clark).

5862. **Gaudet, F. J., & Curry, M. A. The effects of business conditions upon the sanity of a population.** *J. Appl. Psychol.*, 1933, **17**, 130–135.—A study of annual reports of admissions to the New Jersey State Hospital at Greystone Park for the years 1895 to 1930 when compared with indices of business conditions seems to support the contention of hospital superintendents and clinicians that during business depressions a greater amount of mental illness appears.—*R. S. Schultz* (Psychological Corporation).

5863. **Goldstein, K. L'analyse de l'aphasie et l'étude de l'essence du langage.** (Analysis of aphasia and the study of the essence of language.) *J. de psychol.*, 1933, **30**, 430–496.—*N. L. Munn* (Pittsburgh).

5864. **Harding, G. T. Functional neuroses—their nature and relation to injury.** *U. S. Bur. Labor Stat. Bull.*, 1933, No. 577. Pp. 182–189.—A discussion of the psychoneuroses in relation to compensation claims in industry.—*C. M. Louttit* (Indiana).

5865. **Harrington, M. Mental hygiene versus psychoanalysis.** *Psychiat. Quar.*, 1933, **7**, 357–368.—This article is a reply to one by Frankwood E. Williams in which he asserts that there is no mental hygiene. The author contends that in this Williams is merely being a consistent psychoanalyst. Belief in mental hygiene means belief in right living as the way to mental health, and the psychoanalyst cannot consistently believe in right living as the way to mental health because he does not believe that wrong living is the cause of mental disease. Mental disease, according to psychoanalysis, is due to unconscious perverted sexual desires which date back to early infancy, and the only way to deal with it is to deal with these unconscious desires to which it is due. This the analyst claims to be able to do by his psychoanalytic treatment. The nearest he comes to mental hygiene is when he advises people to come to him early for treatment, before their repressed sexual desires have had a chance to do serious harm. So if we accept psychoanalysis we must reject mental hygiene; but why accept psychoanalysis? It is generally admitted that psychoanalysis is in many ways a flimsy structure, but it continues to be tolerated mainly because it is assumed that its defects are superficial and will be corrected in time. With this optimistic opinion the author is unable to agree. He contends that the foundation of psychoanalysis is essentially unsound. Psychoanalysis is a purposivistic psychology and its basic concepts are animistic. It is an attempt to explain abnormal behavior without taking into consideration the anatomical mechanism by which all behavior, both normal and abnormal, is produced. The author believes that the psychopathology of the future will be built upon a stimulus-response psychology and that its basic concepts will be physiological.—*E. T. Burr* (Vocational Adjustment Bureau).

5866. **Helsmoortel, J., Nyssen, R., & Thienpont, R. Les troubles olfactifs dans les traumatismes cranio-cérébraux.** (Olfactory difficulties in cranio-cerebral traumatisms.) *J. belge de neur. et de psychiat.*, 1933, **33**, 427–438.—A résumé of a series of observations carried out on 43 patients afflicted with partial or complete anosmia caused by cranio-cerebral traumatism. The work is published in detail in the *Revue d'oto-neuro-ophtalmologie*, 1933.—*H. W. Karn* (Clark).

5867. **Heuyer, G., & Dublineau, J. Etat démentiel chez un enfant, consécutif à une intoxication oxycarbonée chronique.** (Demential state in a child, following a chronic carbon monoxide intoxication.) *Ann. méd.-psychol.*, 1933, **91**, 223–229.—A child who seemed to develop normally mentally until the age of four then began to change after continual exposure to leaking gas pipes. On several occasions all the members of the family became ill from the gas. The patient lost his ability to talk and perform the usual routine of the nursery school, and showed marked emotional disturbances. His brother and sister made complaints of malaise and were kept at the grandmother's. Besides this difference in treatment, the patient's reaction may have been due to a greater susceptibility to the poisoning than the other children, since he showed several physical signs of degeneracy.—*M. B. Mitchell* (New Hampshire State Hospital).

5868. **Heuyer, G., & Lacan, J. Un cas de perversion infantile par encéphalite épidémique précoce diagnostiqué sur un syndrome moteur fruste.** (A case of infantile perversion from precocious epidemic encephalitis diagnosed on a slight motor syndrome.) *Ann. méd.-psychol.*, 1933, **91**, 221–223.—Although of normal intelligence, the 14-year-old boy could be kept neither in school nor at home because of his cruelty to other children. He had suffered from epidemic encephalitis at the age of two. He did not show a typical Parkinson syndrome, but he had a rather fixed facies, palpebral tremors when closing the eyelids, and fine tremors of the tongue, and his writing showed fine tremors of the hand.—*M. B. Mitchell* (New Hampshire State Hospital).

5869. **Heuyer, G., & Lagache, —. Syndrome d'influence symptomatique d'une encéphalite, impulsions, suicide et homicide.** (Syndrome of symptomatic influence with an encephalitis, impulsions, suicide and homicide.) *Ann. méd.-psychol.*, 1933, **91**, 214–220.—A young man who had suffered from encephalitis had many impulsions and considered himself possessed. He felt someone in him was telling him, even forcing him, to do various acts such as shooting himself or others. He had gone to the hospital voluntarily for short periods, but was not committed until he had shot two strange women on the street. The only reason he could give for doing it was that he wanted to prove that men are stronger than women.—*M. B. Mitchell* (New Hampshire State Hospital).

5870. **Hoffman, H. F. Neurosen und psychopathische Persönlichkeiten.** (Neuroses and psychopathic personality.) *Fortsch. Neur. Psychiat. u. Grenzgeb.*, 1933, **5**, 359–366.—In this article are brief discussions of the general work of Bumke, Hoche, Hoffman and Reichart, the work on compulsion neuroses by Störring, work concerning the psychical structure of psychopaths (Schneider), sexual perversion (Frey, Fischer, Werner, Cocchi) and several other topics of a similar order. There is a bibliography.—*D. S. Oberlin* (Newark, Del.)

5871. **Hoven, H. Un cas de démence à la ménopause.** (A case of dementia at the menopause.) *J. belge de neur. et de psychiat.*, 1933, **33**, 497–498.—A summary of the autopsy findings on a case of catatonic dementia at the menopause.—*H. W. Karn* (Clark).

5872. **Hoven, H. Un cas de démence avec épilepsie.** (A case of dementia with epilepsy.) *J. belge de neur. et de psychiat.*, 1933, **33**, 527–530.—A case study of a woman of 25 years of age who has been afflicted since the age of 16 with epileptic crises, a state of intellectual deficiency, various mental disturbances (confusion, stupor, negativism, etc.) and hysterical crises. According to the author two diagnoses of the case can be defended, (1) epilepsy with hysteria and mental degeneracy, or (2) dementia praecox.—*H. W. Karn* (Clark).

5873. **Labat, G. Clinical aspects of tic douloureux.** *Med. J. & Rec.*, 1933, **138**, 204–206.—The manifestations of tic douloureux differ according to the individual's psychological traits. Labat distinguishes three types of reaction during the attacks: (1) The violent, the patient giving "an extravagant histrionic demonstration," with self-traumatization of the painful areas. (2) The apprehensive. The patient's appearance is anxious, and talking starts the pain. The facial muscles are in clonic or tonic contraction, and the attitude is rigid. Attempts to examine elicit defensive movements. (3) The placid, giving only faint outward indications. Mechanical irritation, perhaps also vasospasm of the superficial and deep areas of hyperesthesia, precipitate the attack. These "trigger areas" are most frequently located on the lips, alae nasae, and tip of the tongue.—*M. E. Morse* (Catonsville, Md.)

5874. **Laignel-Lavastine, —, D'Heucqueville, G., & Klotz, B. Guérisseur, martyre thérapeutique et maisons hantées.** (Healer, therapeutic martyr, and haunted houses.) *Ann. méd.-psychol.*, 1933, **91**, 54–57.—A woman suffering from hepatic stomach pains which were not relieved by medical treatment resorted to a healer. After two years of physical torture, the patient was very upset mentally and the healer died. The patient then began hearing strange sounds in her house at night, and interpreted these as being caused by the spirit of the dead healer come back to haunt her. The noises were also heard in the home of her sister and of her husband's parents. The noises were heard not only by the patient, but by her husband and children, her sister, her husband's parents, and some friends. Psychotherapy, sedatives, and separation of the sisters were the methods of treatment suggested.—*M. B. Mitchell* (New Hampshire State Hospital).

5875. **Lewis, N. D. C. Borderlines of sanity.** *Scient. Mo.*, 1933, **36**, 552–555.—Strains of the machine age and persistent habits of self-scrutiny are contributing causes of insanity, which is a matter not of individual peculiarities but a change in the entire personality.—*J. F. Dashiell* (North Carolina).

5876. **Lowrey, L. G., & others. Five years' experience in supervision of psychiatrists, psychologists and psychiatric social workers in simultaneous training.** *Amer. J. Orthopsychiat.*, 1933, **3**, 278–309.—An informal discussion of training problems by members of the Institute for Child Guidance.—*H. Peak* (Yale).

5877. **Lucherini, T. Distrofia adiposo-genitale famigliare ed alterazioni craniche. Contributo allo studio dei rapporti fra sindromi neuro-ipofisarie e particolari aspetti radiologici cranio.** (Familial adiposogenital dystrophy and cranial alterations. Contribution to the study of the relationships between the neuro-hypophyseal syndrome and particular radiological aspects of the cranium.) *Policlinico (sez. Medica)*, 1933, **40**, 19.—The author had occasion to study a case of adiposogenital dystrophy of the Fröhlich type accompanied in diseases of the same family by cranial alterations of a similar nature. After having recognized paternal syphilis, he discusses the etiological problem and carries out a differential examination on the basis of reasons of a clinical and radiological nature. He also considers,

from the pathogenetic viewpoint, the relationships existing between the clinical syndrome and cranial alterations. He finally proposes hypotheses which seem to him most reasonable; among others that of a familial osteo-dystrophy of probable endocrino-pathological origin.—*R. Calabresi* (Rome).

5878. **Marchand, L., Deschamps, —, & Truche, —. Epilepsie traumatique. Crises hallucinatoires et accès d'automatisme ambulatoire tantôt conscients et mnésiques tantôt inconscients et amnésiques.** (Traumatic epilepsy. Hallucinatory crises and attacks of ambulatory automatism, sometimes conscious without amnesia, sometimes unconscious with amnesia.) *Ann. méd.-psychol.*, 1933, **91**, 40–43.—The case is presented of a man suffering from epilepsy following a heavy blow on the head. Periodically he has visual hallucinations of seven Germans pursuing him. Four such attacks are described in which he traveled for hours by foot and by rail trying to evade them. He remembered the first fugue and had only a partial amnesia for the last one described, but was unconscious of the others.—*M. B. Mitchell* (New Hampshire State Hospital).

5879. **Marchand, L., Deschamps, —, & Truche, —. Epilepsie psychique partiellement consciente et mnésique. Délire d'influence explicatif transitoire consécutif aux accès.** (Epileptic psychosis partially conscious and without amnesia. Transitory explanatory delusion of influence following the attacks.) *Ann. méd.-psychol.*, 1933, **91**, 43–47.—A case history is presented of a man who has attacks of automatism in which he is violent. Following these he is in a delirious state for several days, during which he is very paranoid and tries to explain his undesirable conduct by blaming it on other people who are influencing him.—*M. B. Mitchell* (New Hampshire State Hospital).

5880. **Marcus, G. F. Trends in treatment.** *Amer. J. Orthopsychiat.*, 1933, **3**, 337–348.—The adoption of a passive role by the social worker is discussed as a therapeutic tool. The attitude of passivity involves a renunciation of the parental role, but does not mean a neutral experience to the client. It rather provides a setting in which he may develop self-expression, self-discovery and self-responsibility.—*H. Peak* (Yale).

5881. **Marsh, L. C. An experiment in the group treatment of patients at the Worcester State Hospital.** *Ment. Hygiene*, 1933, **17**, 396–416.—A brisk description of lectures, discussions, musical entertainments, and concerts given as part of a program of group treatment in a state hospital. The groups treated were: (1) personnel, for whom the work consisted in instruction in principles of psycho- and occupational therapy; (2) patients, for whom the group meetings consisted mainly in piano or organ music, spontaneous singing, listening to interesting brief talks, dancing, and radio talks (the hospital has its own radio; heterosexual group commingling is encouraged); and (3) the community, including both relatives of patients and representatives of the public less immediately concerned, for whom lectures were given on the elementary principles of mental hygiene for themselves, and who were encouraged to use the facilities of the hospital for giving entertainments in no way connected with the hospital function. The author is convinced of the effectiveness of his methods. Patients, above all, seem to benefit by the treatment; and group therapy is not only possible but in many ways even superior to individual treatment simply because of the fact that it draws patients out of their isolation. The author submits a few pertinent recommendations, the outcome of his experience.—*O. L. Harvey* (Boston, Mass.)

5882. **McDougall, W. Psychopathologie funktioneller Störungen.** (Psychopathology of functional disturbances.) Leipzig: Barth, 1931. Pp. 256. RM. 15.00.—Abridged German edition of *An Outline of Abnormal Psychology*, with a postscript by Hans Prinzhorn.—*R. R. Willoughby* (Clark).

5883. **Montassut, M. La fatigue du neurasthénique.** (The fatigue of the neurasthenic.) *Evolution psychiat.*, 1931, **2**, 55–80.—After having shown that physiological fatigue and neurasthenia show the same symptoms with a different pathogenesis, in the sense that the work which engenders normal fatigue dissipates neurasthenic fatigue, the author shows that the humoral data indicate that neurasthenic fatigue may be attributed to alkalosis, while normal fatigue is acidogenic, whence the observed antagonism.—*M. G. Willoughby* (Clark).

5884. **Mourgue, R. Neurobiologie de l'hallucination.** (Neurobiology of hallucination.) Brussels: Lamertin, 1932. Pp. 416. 91 fr.—The author reviews earlier treatments of hallucination, and finds that in part of them hallucination has been attributed to the intensification of the image, while in others it has been held to be due to a general psychic condition, the "dissociation of the personality." His attempt to subject the first of these two hypotheses to clinical and experimental verification afforded no support for its acceptance. Clinical evidence, however, favors the hypothesis of depersonalization as a condition underlying true hallucination, but such an hypothesis takes account of only one of its characteristics, namely, objectivity through relation to oneself. This objectivity is shown to have at basis a complex motor attitude. In the second part of the book the author follows the lead of Hughlings Jackson in seeking the primitive basis of hallucination in the most primitive part of the nervous system, the organo-vegetative part. Cases of hallucination reported by Head several years ago, as well as material presented by the Jaensch brothers in their study of the tetanoid type, show the relation of this part of the nervous system to occurrence of the phenomena of true hallucination. The labyrintho-cerebellar apparatus, the mechanism for sensorial adaptation, has been shown to be automatically innervated by Winkler, De Spitzer, and De Spiegel, and this fact fits into our picture. The relation of depersonalization to Pavlov's central inhibition is suggested. In the third part of the book the author examines true hallucination from the biological point of view. Biology is defined as the study of the ensemble of processes which have as their

function the assuring of the vital interests of the living being. The author identifies the instinct with the activity of the organo-vegetative sphere, and asserts that depersonalization comes about whenever there is an eruption from the instinctive sphere into the sphere of orientation and causality. A possible parallel of the visual system seems to be present in the organo-vegetative system. The exclusively cortical phase of hallucination is explained on the basis of an indefinite number of engrams, and these engrams in turn are defined as the dynamic resultant of a series of processes participated in by the whole cortex. Sherrington's subliminal fringe and its temporal course may afford an explanation of the engram. There is an introduction by Henri Bergson and a bibliography of 1081 titles.—*E. H. Kemp* (Clark).

5885. **Nacht, S. La structure inconsciente de quelques psychoses.** (The unconscious structure of certain psychoses.) *Rev. fr. de psychanal.*, 1932, **5**, 471–500.—Psychoanalytic theories of delusional states, schizophrenia, and melancholia are discussed at some length.—*P. Blanchard* (Philadelphia Child Guidance Clinic).

5886. **Noble, T. D. The place of occupational therapy in the management of the functional neuroses.** *Psychiat. Quar.*, 1933, **7**, 378–385.—Consideration is given to the interrelationships of the psychiatrist and occupational therapist in their attempt to find a level at which the patient's energies may be directed into channels of real activity. An effort is made to establish a normal rhythm of work, rest and play, so that the social impulse may be fully restored. Two case studies are given to illustrate the application of the method.—*E. T. Burr* (Vocational Adjustment Bureau).

5887. **O'Brien-Moore, A. Madness in ancient literature.** New York: Stechert, 1933. Pp. 228. $1.50.—*R. R. Willoughby* (Clark).

5888. **Page, M. L. The mechanical ability of subnormal boys.** *J. Appl. Psychol.*, 1933, **17**, 164–181.—100 subnormal boys enrolled in special classes were compared with an equal number of normal boys in the 7th grade as to performance on the Minnesota Spatial Relations Test. In general the subnormal group is inferior to the normal group both in time and error scores. A brief review of the literature on this topic is included.—*R. S. Schultz* (Psychological Corporation).

5889. **Paterson, A. S. The so-called law of anticipation in mental disease.** *J. Neur. & Psychopath.*, 1933, **13**, 193–210.—Much material is brought up to date and examined. Arguments are presented to show that apparent antedating in mental disease is the result of the way in which the material was collected. Conclusions based on the supposed law of anticipation as applied to eugenics are criticized.—(Courtesy *Bibliographia Eugenica*).

5890. **Petit, G. Excitation maniaque et paranoia.** (Manic excitation and paranoia.) *Ann. méd.-psychol.*, 1933, **91**, 1–12.—Some patients who are known as euphoric sometimes have short periods of depression in which they may be very paranoid. It is of considerable medico-legal significance that manics are sometimes able voluntarily to control their excitation in order to convince people that they are not psychotic.—*M. B. Mitchell* (New Hampshire State Hospital).

5891. **Pfeifer, R. A. Hirnpathologischer Befund in einem Fall von doppelseitiger Hemianopsie mit Maculaaussparung.** (Cerebro-pathological findings in a case of bilateral hemianopsia with macula spared.) *J. f. Psychol. u. Neur.*, 1930, **40**, 319–337.—Microscopical examination agrees with results of the study of the external geniculate body in the monkey by Brouwer and Zeeman. That structure seems to send to the cortex a projection of the retinal quadrants, with fixed though somewhat vague boundaries. The superior fibers gradually turn in toward the center of the bundle, which accounts for disagreement in findings when sections were made at different levels. In the present case, bilateral interruption of the dorsal region of the bundle, where the macular fibers are located, saved the macular area.—*E. H. Kemp* (Clark).

5892. **Pollock, H. M., Malzberg, B., & Fuller, R. G. Hereditary and environmental factors in the causation of dementia praecox and manic-depressive psychoses.** *Psychiat. Quar.*, 1933, **7**, 450–479.—This study is one of a series resulting from a research program undertaken jointly by the New York State Department of Mental Hygiene and the State Charities Aid Association. A brief résumé and criticism of some of the principal studies of the inheritance of mental disease precedes the data assembled by these authors. The fact is emphasized that experiment in the study of human families is almost impossible, and that tracing the origin of mental characters is beset with great difficulties. Hence critical comments are made as to the validity of statistical reports offered by such investigators as Koller, Diem, and Jolly. Their studies reveal a presumption in favor of heredity as a general factor in the causation of mental disease; but since the environmental conditions of the two groups they studied were manifestly different, Pollock and his assistants feel that the degree of tainting which Koller, Diem, and Jolly report may be associated with differences in social stratification. In Pollock's study, which will be published in a subsequent issue of this journal, both family history and environmental setting in two groups of patients, one with dementia praecox and one with manic-depressive psychoses, will be analyzed. By limiting their study to these specific groups, certain exogenous factors will be ruled out, thus throwing into sharper outlines the relative forces of heredity and environment. A bibliography accompanies this article.—*E. T. Burr* (Vocational Adjustment Bureau).

5893. **Pop, Z. A hisztériás lelki alkat és a tömegpsziché lélektani kapcsolatairól.** (On the psychological relationship between hysterical personality structure and the crowd mind.) *Magyar Psychol. Szemle*, 1932, **5**, 104–120.—Various parallels between the hysteric's and the crowd's behavior are pointed

out. Considerable emphasis is placed on Kretschmer's views.—*D. Shakow* (Worcester State Hospital).

5894. **Reiche, A. Der Altersunterschied zwischen Vater und Mutter bei an Mongolismus leidenden Kindern.** (The age difference between father and mother of the child in cases of mongolism.) *Zsch. f. Kinderhk.*, 1932, **54**, 137–139.—*K. C. Pratt* (Michigan Central State Teachers College).

5895. **Riley, H. A. Migraine.** *Bull. Neur. Inst. New York*, 1932, **2**, 429–544.—A general article on all aspects of the subject, including statistics of heredity. —(Courtesy *Bibliographia Eugenica*).

5896. **Roemer, H. Die eugenischen Aufgaben der praktischen Psychiatrie.** (The eugenic responsibilities of practical psychiatry.) *Zsch. f. psych. Hygiene*, 1933, **6**, 97–114.—In Germany, eugenics will in the future influence public health more strongly than any other branch of social or scientific medicine. The psychiatrist's responsibilities for the mental aspects of eugenics are: advice to individuals—best provided for on a large scale through a system of matrimonial clinics; education of the public; and advancement of eugenic research, especially in regard to inheritance of mental diseases. Roemer stresses the wealth of eugenic material in the case histories of mental hospitals; the indexing of all cases of hereditary mental disease (already started by volunteer help in some parts of Germany); and courses in eugenics for institutional physicians. References are given on inheritance of mental disease and defect and incidence of mental disease in the general population.—*M. E. Morse* (Catonsville, Md.)

5897. **Schottky, J. Innere Krankheiten und Psychiatrie.** (Internal diseases and psychiatry.) *Fortsch. Neur. Psychiat. u. Grenzgeb.*, 1933, **5**, 288–320.—The first two pages of this article are concerned with a general introduction limiting the scope of the article to such internal diseases as tuberculosis and diseases of the heart. The remainder is divided into two sections. The first is concerned with mental changes accompanying tuberculosis as reported by various internists. Such changes are euphoria, decreased responsibility, and over-excitability. Statistics are given in regard to mortality in women and in cases of dementia praecox who are tubercular. The second section deals in a similar manner with diseases of the heart. Increased emotional excitability, restlessness, and anxiety are found in patients with palpitations. Fear of death is associated with angina pectoris. There is a very full bibliography.—*D. S. Oberlin* (Newark, Del.)

5898. **Sherman, M., & Crider, B. Verification of emotional regression by tests.** *Amer. J. Psychiat.*, 1933, **12**, 1085–1094.—A case of hysteria is described, accompanied by samples of the patient's performance on the Stanford-Binet square and triangle, drawing of a house, and signing her name at various "regressed age levels." These activities were performed in a way characteristic of the regressed level.—*N. Goldman* (Boston Psychopathic Hospital).

5899. **Singer, H. D., & Low, A. A. The brain in a case of motor aphasia in which improvement occurred with training.** *Arch. Neur. & Psychiat.*, 1933, **29**, 162–165.—A clinical case is reported of a female subject, who at the age of 39 became paralyzed in the right side of the body, the face, arm, and leg. She could understand what was said and could recognize objects. She was unable to walk, to read, or to say any sounds except *o–de–dar*. By persistent training she was taught to use a vocabulary of five hundred words and to walk with a cane. There was little or no return of the ability to read. An autopsy performed twenty-five years later revealed complete absence of the hinder parts of the second and third frontal convolutions.—*V. M. Jones* (Boston Psychopathic Hospital).

5900. **Sosset, M. Recherches sur les troubles de la mémoire.** (Research on defects of memory.) *Ann. méd.-psychol.*, 1933, **91**, 13–39.—Twelve different tests, besides an intelligence test, were used on 117 patients. Most psychotic patients scored better on the tests for attention than for memory. On the other hand, the imbeciles scored higher on tests for memory than for attention. Visual imagery, especially in cases of hallucinatory psychoses, is frequently superior to recent memory.—*M. B. Mitchell* (New Hampshire State Hospital).

5901. **Steen, R. R. Prognosis in manic-depressive psychoses.** *Psychiat. Quar.*, 1933, **7**, 419–429.—The author's investigation is based on the data obtained from the study of the complete case records of 493 patients admitted to Kings Park State Hospital between January 1, 1920 and December 31, 1928, and diagnosed manic-depressive psychosis. Each patient was considered from the standpoint of body type, previous personality, heredity, previous attacks, age of first attack, onset, duration of psychosis, and trends. The observations indicate that an individual would be most likely to recover from a manic-depressive attack if his personality previous to the attack had been normal, and if he had had a clear heredity, no previous attacks and an abrupt onset of a typical manic or depressive reaction with no delusions or hallucinations. There is a bibliography.—*E. T. Burr* (Vocational Adjustment Bureau).

5902. **Stone, H. M., & Hart, H. Contraception and mental hygiene.** *Ment. Hygiene*, 1933, **17**, 417–423.—A study of the first 100 mental-hygiene cases (i.e., those submitted by psychiatrists, etc., the case being primarily one of psychological maladjustment) at the maternal health center in Newark shows that at least half included anxiety neurosis in the wife; usually the cause of the trouble was fear of pregnancy. Even those cases in which the husband or the child constituted the main source of maladjustment, it was found that sexual factors underlay the psychological phenomena. The use of inadequate contraceptive measures, especially of coitus interruptus, is the main factor in the neurosis of either husband or wife. The authors suggest that the freer dissemination of adequate contraceptive information may prevent the onset of certain mental maladjustments.—*O. L. Harvey* (Boston, Mass.)

5903. **Stone, S. Chronic progressive chorea—Huntington's disease.** *New Eng. J. Med.*, 1932, **207**, 974–983.—Huntington's chorea, chronic, progressive non-hereditary chorea, alcoholism, nervousness, and cases of social maladjustment in two families in which 23 of the 218 members have had chorea.—(Courtesy *Bibliographia Eugenica*).

5904. **Strauss, A. Beiträge zur Einteilung, Entstehung und Klinik der schwersten Schwachsinnsformen.** (Contribution to the classification, origin, and clinical history of the most severe forms of feeble-mindedness.) *Arch. f. Psychiat. u. Nervkrank.*, 1933, **99**, 693–708.—(Courtesy *Bibliographia Eugenica*).

5905. **Strecker, H. Allgemeine und statistische Übersicht über das Geisteskranken- und Schwachsinnigenwesen in England.** (General and statistical review of matter pertaining to the psychotic and feeble-minded in England.) *Arch. f. Psychiat. u. Nervkrank.*, 1933, **98**, 769–786.—(Courtesy *Bibliographia Eugenica*).

5906. **Tinel, J. Psychose périodique et polynévrite. Le traitement des polynévrites par les méthodes anti-choc.** (Periodic psychoses and polyneuritis. The treatment of the polyneuritis by anti-shock methods.) *Ann. méd.-psychol.*, 1933, **91**, 58–66.—Two cases are presented of women who, after suffering periodically from depression and anxiety, developed symptoms of polyneuritis. In both cases, treatment seemed to relieve the physical symptoms but to bring a temporary return of the mental symptoms.—*M. B. Mitchell* (New Hampshire State Hospital).

5907. **Tramer, M. Allgemeine Psychohygiene.** (General mental hygiene.) *Schweiz. Zsch. f. Hygiene*, 1931, pp. 97.—The author considers in a philosophical spirit the entire field of mental hygiene, its objects, essential goals, and methods. Among the latter he enumerates suggestion, persuasion, psychoanalysis, individual psychology, and finally education in mental health. As to application, he considers the hereditary problem, the hygiene of pregnancy (fetal mental hygiene), the infant, puberty, and the conflicts of adolescence. The viewpoints are numerous, simply sketched, and fitted into a comprehensive scheme.—*M. G. Willoughby* (Clark).

5908. **Travis, J. H. Precipitating factors in manic-depressive psychoses.** *Psychiat. Quar.*, 1933, **7**, 411–418.—A series of 70 cases in the Creedmore division of the Brooklyn State Hospital is reviewed in this paper. As precipitating factors, the author notes marital maladjustment in 19 females and 4 males; death in the family in 10 females and 2 males; childbirth in 8 out of a total of 53 females; physical condition in 5 females and 3 males; economic stress in 3 females and 4 males; antagonism toward parents in 3 males and 3 females; sickness in the family in 5 females and 1 male. A brief résumé of each of these arbitrary groups is given. The writer stresses the idea that in most of these cases "inflammable" complexes seemed to be present in the unconscious awaiting "ignition."—*E. T. Burr* (Vocational Adjustment Bureau).

5909. **Wile, I. S. The mental-hygiene approach to public health.** *Ment. Hygiene*, 1933, **17**, 380–395.—A plea before the Dutchess County Health Association for more and better mental hygiene as a part of the public health program.—*O. L. Harvey* (Boston, Mass.)

5910. **Witzel, A. E. Regression in manic-depressive reactions.** *Psychiat. Quar.*, 1933, **7**, 386–400.—This paper is offered as a preliminary report of a study of the process of regression. The author first reviews briefly some of the literature relative to regression. Following this, several outstanding observations are made. Among these the almost universal presence of some form of the death motive, and the very frequent indication in the manic state of the rebirth or fantasied living out of the life of another individual are particularly noted. The material presented is of impressionistic fabric and tentative, and it is definitely stated that it awaits further study. The opinion is expressed, however, that no patient should be considered hopeless as to therapy because of profound regression, nor should any case be ignored therapeutically because of what appears to be a mild regression. Although many of the phenomena of regression as revealed in this study occurred in cases of dementia praecox, the reaction as a whole cannot be interpreted merely in terms of regression; hence it is essential that causation, setting, and the life history of the individual involved be given due consideration. —*E. T. Burr* (Vocational Adjustment Bureau).

5911. **Wolfe, W. B. Nervous breakdown: its cause and cure.** New York: Farrar & Rinehart, 1933. Pp. xv + 240. $2.50.—The book was written to be put into the hands of the patient himself, his family, or his physician. Nervous breakdown is an unconscious offensive-defensive device to save "face." "The maintaining of 'face' is the essential unconscious occupation of every human being." The nervous breakdown occurs just before, during, or following a personality disaster which threatens the maintenance of the (usually unimportant) factor on which the individual has based his sense of security and superiority. Causes and symptoms are described in Chapters I and II. Chapters III-V are case histories of cures in the fields of adolescent, social, sexual, economic, "depression," and family breakdown. Chapters VI and VII treat of cure, with suggestions for the cultivation of awareness, social responsibility, empathy, the technique of social life, and creative self-realization through constructive use of leisure, cultivation of a sense of humor, and the art of living in the present with romantic illusions in only minor fields.—*A. G. Reynolds* (Winchester, Mass.)

[See also abstracts 5655, 5761, 5762, 5765, 5769, 5773, 5774, 5777, 5813, 5930, 5934, 5941, 5954, 6043, 6093.]

SOCIAL FUNCTIONS OF THE INDIVIDUAL

5912. **Aall, A. Die Neubildung einer Weltsprache.** (The construction of a world language.) *Zsch. f. Psychol.*, 1933, **129**, 213–222.—The generally recognized need for a universal language and the progress

which has already been made toward the construction and popularization of such languages justify the belief that such a development is inevitable. The project raises, however, numerous scientific problems which must be studied before a satisfactory language can be constructed. A number of these problems are listed, and the proposal is made in connection with their investigation that an international committee be formed to coordinate the work of philologists, psychologists and phoneticists.—*R. B. MacLeod* (Swarthmore).

5913. **Allee, W. C., & Cary, W. E. Shall we move to the country?** *Scient. Mo.*, 1933, **36**, 527–538.—Given sufficient effort and money, it is possible to cancel all the city's deficiencies.—*J. F. Dashiell* (North Carolina).

5914. **[Anon.] Juvenile delinquency as related to immigration.** *Eug. News*, 1933, **18**, 74–75.—This is a report of a paper by Clairette P. Armstrong of the Children's Court of the City of New York, read at the meeting of the New York branch of the American Psychological Association. According to the author, the largest national group of delinquents is Italian with 28%. Children of Russian parents, white children of American parentage, and colored children comprise 20, 19 and 12% respectively of the total arraignments. Armstrong says, "It is true of court cases as a whole that the average IQ is at the lower limit of the dull normal": Italians, 71; negroes, 74; two generations American-born, 84; and the total group, 77. She concludes, "Were normal intelligence according to well-standardized psychological tests administered by experts the basis for admission, the leveling-down process of the unassimilable, inferior immigrant would be checked and the unsuspecting immigrant protected from the hardship of difficult adjustment in the U. S."—*M. V. Louden* (Pittsburgh).

5915. **Armstrong, C. P. Juvenile delinquency as related to immigration.** *School & Soc.*, 1933, **38**, 61–64.—The study concerns the delinquents arraigned in the courts of the city of New York in 1930. These delinquents on record constitute 9% of the child population. To this the Italians, Russians, and negroes contribute more heavily than their proportion in the population would indicate their share to be. The native whites contribute also proportionally heavily. Relative to the school population and to the delinquent group as a whole, the negro and Italian delinquents show themselves inferior intellectually. Of course, the average IQ of the total offending group is considerably below that of the general population, that of even the whites with American-born parents being 83.8. The author believes that the school system, emphasizing as it does the verbal adjustments, is not only not helping the immigrant delinquent much, but is actually contributing to his social failures.—*H. L. Koch* (Chicago).

5916. **Bain, R. Die behavioristische Einstellung in der Soziologie.** (The behavioristic approach to sociology.) *Sociologus*, 1933, **9**, 28–44.—This is an account of one of the recent experimental approaches to sociology, the behavioristic approach, which deals only with the overt, observable, adjustive and non-adjustive behavior of persons and groups. Eight principles on which this approach is based and which qualify it as an experimental, scientific approach are described and discussed.—*E. Fehrer* (Bryn Mawr).

5917. **Bally, C. Les notions grammaticales d'absolu et de relatif.** (The grammatical concepts of absolute and relative.) *J. de psychol.*, 1933, **30**, 341–354.—A discussion of the concepts of absolute and relative time and superlatives.—*N. L. Munn* (Pittsburgh).

5918. **Bartholomew, W. T. Baton movements.** *Peabody Bull.*, 1933, **29**, No. 2, 37–39.—By means of a tiny lamp attached to the end of a baton photographic records were taken of the baton movements of two reactors beating 4/4 time legato. Actual movements were found to be much different from diagrams given in textbooks of conducting. Motion is almost always curvilinear instead of straight, beat instants tend to come at the bottom of a movement instead of at the sides, "up-beats" are frequently actual down-beats, there is some tendency for the baton to be at its fastest speeds at the beat instants, and all tendencies vary with the individual, tempo, and dynamics. Staccato beats are more angular than legato.—*L. Petran* (Peabody Conservatory of Music).

5919. **Bernard, J. The distribution of success in marriage.** *Amer. J. Sociol.*, 1933, **39**, 194–203.—A study was made of 252 married individuals representing 146 marriages. Of these, 31 were clinical cases. The sample was younger and more highly educated than the general population, with smaller families and better economic status than average. The distribution of marital satisfaction showed a very marked negative skew. Three important points in the curve were the average, the indifference point (score of 50), and the success-failure point (66 for women, 68 for men). Brief clinical summaries are presented to give qualitative insight into the meaning of various scores. —(Courtesy *Amer. J. Sociol.*)

5920. **Bird, C., & Beers, F. S. Maximum and minimum inner speech in reading.** *J. Appl. Psychol.*, 1933, **17**, 182–197.—The Chapman-Cook Speed of Reading Tests (forms A and B) were given to 305 adult students, with instructions in one form to "pronounce every word in inner speech" and in the other form to refrain from inner speech. Speed of reading was found to be superior under conditions of minimum inner speech, and there was a slight superiority in favor of the younger members of the group.—*R. S. Schults* (Psychological Corporation).

5921. **Bühler, K. Zur Geschichte der Ausdruckstheorie.** (On the history of the theory of expression.) *Zsch. f. Psychol.*, 1933, **129**, 246–261.—This represents the introduction to the chapter on linguistic expression in Bühler's new book, *Sprachtheorie*. Six stages in the history of the theory of expression are reviewed, and a tentative distinction is drawn between physiognomy and pathognomy.—*R. B. MacLeod* (Swarthmore).

5922. **Cantril, H. Recent trends in American social psychology.** *Sociologus*, 1933, **9**, 195–199.—

This is a summary of the developments and specific trends found in social psychology in America during the last few years, based on a review of 23 recent books and articles.—*E. Fehrer* (Bryn Mawr).

5923. **Chen, W. K.-C. The influence of oral propaganda material upon students' attitudes.** *Arch. of Psychol.*, 1933, No. 150. Pp. 43.—The problem was to measure changes of attitudes as affected by propaganda. College students of the west, mid-west, south and east were exposed to propaganda on the Manchuria situation in 1931 and 1932. Art propaganda was also presented. Each group subjected to the pro-Japanese and pro-Chinese propaganda shifts in the direction toward which the particular propaganda impels. A few minutes of vigorous propaganda may produce large and measurable results. Propaganda has an effect on all, ranging from those of opposite to those of similar attitude. Groups subjected to neutral propaganda shifted from their originally pro-Chinese position to a more neutral viewpoint. Large shifts occurred from both the pro-Japanese and the pro-Chinese extreme positions, but shift was greatest from the originally pro-Chinese extreme. College students were as much influenced in attitudes by an emotional appeal as by a logical presentation of facts. A bibliography of 22 items is given. The 20 selected statements and the pro-Japanese and pro-Chinese propaganda are appended.—*E. M. Achilles* (Columbia).

5924. **Cochran, M. Insensitiveness to tone quality.** *Aust. J. Psychol.*, 1931, **9**, 131–134.—Pianists frequently consider the sounds produced by their instrument as fixed, and varying only in intensity. Tone quality is determined by the number of partials and their relative strengths; the player cannot change their number, but by variations in pressure he can change their relative strengths, and in consequence the tone quality. According to Helmholtz, the shock of the hammer on the string hardens the felt for a part of the time contact, which makes the upper partials predominant and the tone discordant. The purity can also be changed by the noise of the impact of the finger upon the key. These adulterations are audible only to receptors particularly sensitive to tonal quality, and for these they are especially marked at certain pitch ranges.—*M. G. Willoughby* (Clark).

5925. **Coriat, I. H. The dynamics of stammering.** *Psychoanal. Quar.*, 1933, **2**, 244–259.—The stuttering neurosis is characterized by the utilization of manifestations of the pregenital libido as clinical symptomatology. Such early libidinal organization may be detected in nursing and biting movements of attempted speech and anal-sadistic conversions. Cases are cited illustrating regressions to oral sucking, anal-sadistic conversion, and cannibalistic biting stages. Stammering signifies incomplete mastery of the Oedipus complex with identification with a mother who continues as a love object from the pre-Oedipal stage. In female stammerers the phallus is substituted for the nipple.—*M. H. Erickson* (Worcester State Hospital).

5926. **Cronbach, A. The psychology of religion.** *Psychol. Bull.*, 1933, **30**, 327–361.—361 titles are reviewed under the headings: psychoanalytic studies; non-psychoanalytic studies; theoretical studies (divided into studies on children, students, other youth, and adults, and employing as methods statistics, case histories, introspections, questionnaires, literary effusions, etc.); practical studies (for psychiatrists, for teachers, for clergymen, faith healing, and church methods and prayer); and non-scientific studies. "We should note the extent to which this literature departs from scientific canons . . . extra-scientific penchants, evaluation, and appraisal obtrude constantly."—*J. F. Dashiell* (North Carolina).

5927. **De Groot, A. W. Le mètre et le rythme du vers.** (The meter and rhythm of verse.) *J. de psychol.*, 1933, **30**, 326–332.—*N. L. Munn* (Pittsburgh).

5928. **Drake, R. M. Four new tests of musical talent.** *J. Appl. Psychol.*, 1933, **17**, 136–147.—Tests for musical memory, interval discrimination, retentivity of "elemental factors of melody," and intuition (ability to complete an unfinished theme) which may be administered to groups are described. Coefficients of reliability and correlations with teachers' estimates are indicated for each of the tests. —*R. S. Schultz* (Psychological Corporation).

5929. **Eaton, H. S. Language learning.** New York: Bureau of Publications, Teachers College, Columbia University, 1933. Pp. viii + 59. $1.00.—This is the summary of a report to the International Auxiliary Language Association, made by the division of psychology of Teachers College. After a brief discussion of the functions of language, the author reports experiments conducted in the teaching of Esperanto. The evidence strongly suggests that the use of a synthetic language is an aid to language learning and is more easily acquired than is a foreign language. The author discusses at some length ways of making the learning process easier. An entire section of the report is devoted to the possibilities and methods of improvement of an international auxiliary language. Of especial significance to psychologists is perhaps that portion of the report devoted to special data.—*O. L. Harvey* (Boston, Mass.)

5930. **Elster, A. Der Krankheitsbegriff und seine Bedeutung in der Kriminologie.** (The concept of disease and its meaning for criminology.) *Krim. Monatsh.*, 1933, **7**, 55–58.—The author develops, in connection with criminal behavior, the idea of the social relativity both of disease and of judgment based on social value, as contrasted with the universally applicable concept which forensic psychiatry has labored to establish. From the standpoint of the ideal sociological norm, antisocial conduct is of course pathological, but so long as want and danger are an inevitable part of the actual social order, it is illogical to consider antisocial activities as necessarily pathological. In different environments the same mental attitude may be normal or abnormal, depending on its sufficiency for the demands of the situation. The juristic concept of disease must be viewed relatively

from two sides: the subjective (signs and symptoms); and the objective, i.e., whether these are important for the society in which the person showed his criminality. For instance, sex offenses are not necessarily pathological if they do not compromise the individual's general social adaptation. This principle of social relativity does not alter the absolute concept of disease, but only its importance for medical and criminological practice.—*M. E. Morse* (Catonsville, Md.)

5931. **Fahrenfort, J. J. Dynamisme en logies denken bij natuurvolken.** (Dynamism and logical thinking of primitive peoples.) The Hague: Wolters, 1933. Pp. 179. f 2.90.—On the basis of a rich literature, Fahrenfort comes to the following conclusions: (1) No great difference in natural talent could be observed between primitive and culturally advanced peoples; likewise their observation ability and self-consciousness is not inferior. (2) Magic, in spite of its importance, has not influenced material culture greatly, and common sense prevails. (3) In the field of medical science useful inventions have been made by primitive peoples, using in only a few cases a different therapeutic principle from those of modern physicians; their knowledge of the human body is excellent, as shown by their surgery and techniques for abortion. (4) The many magic customs are the outcome of spiritual activity; while with some peoples critical minds, skeptical about magic, are not wanting. —*S. van Valkenburg* (Clark).

5932. **Gaspar, J. Kriminalanthropologie eines Dorfes mit Einkindsystem.** (Criminal anthropology of a village practising the one-child system.) *Arch. f. Krim.*, 1933, **92**, 37–43.—A study of 201 families in one of the Hungarian communities which have for the past century ruthlessly practised this limitation. The slow, progressive, characteristic degeneration of these villages is the consequence of intense inbreeding, child marriage, and dysgenic social selection. 62% of the children showed degenerative characteristics (especially epilepsy, endocrine disturbances, and mental defect). During the past 5 years, 6 married persons, around 20 years, died from schizophrenia. In 5 decades, 10 persons were murdered by members of their families; 11 committed suicide to avoid persecution by their heirs; and 50 children "disappeared." Although striving for wealth was the original reason for family limitation, it is now only a rationalization for incapacity for physical or mental exertion. The founders of this régime must, however, have been abnormal themselves.—*M. E. Morse* (Catonsville, Md.)

5933. **Geissler, G. Psychologische Untersuchungsmethoden für stammelnde und stotternde Kinder.** (Methods of psychological examination of stuttering and stammering children.) *Zsch. f. päd. psychol.*, 1931, **32**, 345–353.—The author notes the advantages and disadvantages of current intelligence tests for the examination of children with speech disturbances.—*M. G. Willoughby* (Clark).

5934. **Gelb, A. Remarques générales sur l'utilisation des données pathologiques pour la psychologie et la philosophie du langage.** (General remarks concerning the utilization of pathological data for the psychology and philosophy of language.) *J. de psychol.*, 1933, **30**, 403–429.—*N. L. Munn* (Pittsburgh).

5935. **Goldberg, N. [Social and psychological parallels. The theory of Stanley Hall.]** *Unser Shul*, 1933, **3**, No. 1, 13–18.—An exposition and discussion of Stanley Hall's psychological-pedagogical theories. —*D. Shakow* (Worcester State Hospital).

5936. **Gorodzov, V. A. The typological method in archeology.** *Amer. Anthrop.*, 1933, **35**, 95–102.—This is a discussion of the theoretical foundations of the typological method employed by European archeologists during the last 75 years. The theory involves four basic principles, viz.: causality, evolution, borrowing, and the struggle for survival among artifacts. Thus the law of causality in the industrial sphere asserts that the archeological remains uncovered by excavation are the results of a previous series of artifacts which have existed in universal history. The principle of industrial evolution deals with the process through which one phenomenon is transformed into a genetically related type. The principle of borrowing, plus coincidence, explains the similarities of corresponding phenomena arising at different points of space and time. It explains diffusion of culture traits from group to group. The principle of struggle for survival explains syntheses of industrial forms or culture traits. The material to which these principles are applied is subdivided into categories, groups, genera and types. At the basis is the type understood as a collection of objects similar in function, material and form. Types connected by one quality (beyond their form) compose genera; genera connected by one quality, (beyond their material) form the categories. All archeological simple objects (traits) may be divided into categories, categories into groups, groups into genera, and genera into types. This classification is akin to the Linnaean classification of biological species, but depends on different principles of division. It involves no greater difficulties, and converts archeology into an accurate science capable of reconstructing the entire life of an extinct community. As such it will become an indispensable link between natural and social sciences.—*C. M. Diserens* (Cincinnati).

5937. **Grund, E. Das Lesen des Wortanfanges bei Volkschulkindern verschiedener Altersstufen.** (The reading of the beginnings of words by pupils of different ages.) *Neue psychol. Stud.*, 1930, **6**, 311–316.—The beginning of the word plays a preponderant role in its visual recognition (especially in German substantives). Experiments with a tachistoscope on pupils of different classes show that initial letters (as *S* and *Sch* in the word *Schneeball*) are recognized much better in the word than alone or in nonsense groups of letters, especially with children who have had some practice in reading. The beginning of the word does not have a simple dominance, but is a factor in a complex perception of the unity of the word.—*M. G. Willoughby* (Clark).

5938. **Guillaume, G. Immanence et transcendance dans la catégorie du verbe. Esquisse d'une théorie psychologique de l'aspect.** (Immanence and transcendence in the category of verbs. Outline of a psychological theory of the aspect.) *J. de psychol.*, 1933, **30**, 354–372.—*N. L. Munn* (Pittsburgh).

5939. **Heindl, R. Kriminalpolizeiliche Behandlung von Selbstbezichtigern.** (Treatment of self-accusers by the criminal police.) *Arch. f. Krim.*, 1933, **92**, 84–85.—Heindl emphasizes that self-accusers are not harmless nuisances. They are persons who identify themselves with the doer of a heroic act which they have fantasied but are at present too weak or immature to carry out. By this means they gain a fictitious satisfaction for their unconscious wishes. Any day there may be a criminal explosion. Hence, when a sensational crime is committed, the alibis of persons who have accused themselves of similar deeds should be investigated. Also, the records of convicted criminals should be looked up to discover whether they have come forward as self-accusers in similar cases.—*M. E. Morse* (Catonsville, Md.).

5940. **Jespersen, O. Cause psychologique de quelques phénomènes de métrique germanique.** (The psychological cause of some phenomena of Germanic meter.) *J. de psychol.*, 1933, **30**, 332–338.—*N. L. Munn* (Pittsburgh).

5941. **Karpman, B. Case studies in the psychopathology of crime. Vol. I, cases I-V.** Washington: Mimeoform Press, 1933. Pp. 1042. $12.00.—This volume contains an extensive documentation of the official records and personal histories of five criminals confined in the Department for the Criminal Insane at St. Elizabeth's Hospital. The "official records" consist of "routine anamnestic and biographical material obtained from the patient at admission and during confinement. Physical, psychological, routine psychiatric, and conference examinations by the physicians are included," as well as information obtained whenever possible from other institutions of confinement. Most of the material in each case study was obtained directly from the patient by having him "write his own history" and from this material successive questionnaires were submitted to him until the history was "satisfactorily completed." Psychoanalytical technique was utilized, also information from relatives, friends, and fellow-inmates. Presentation of the material is essentially the same in each case. The official record, which is relatively brief, is given first, followed by the patient's autobiographical account, in which he is encouraged to include his philosophy of life and his comments and rationalizations on many subjects of interest to him, as well as his own explanation of his problems. Next are given accounts of the patient by his fellow-inmates and in cases I to V the letters written by the patient during confinement. This is concluded by a critical review of the entire case history by a fellow-patient, William Brandon, whose comments the author has included because of their discernment and thorough understanding of the problem presented. The author then concludes the record with a one- or two-page epitome. The author makes no attempt to formulate interpretations of the material, reserving this for a later volume. The material is presented essentially as given by the patients, since the author feels that the contradictions, obvious fabrications, and distortions are significant in reaching any understanding of the patient. Also, "the volume is addressed mainly to a public that has no direct interest in refined psychiatric diagnoses and intimate psychiatric discussions," and hence completeness, rather than essential values, is considered. Case I, diagnosed at St. Elizabeth's as psychosis with psychopathic personality, paranoid type, shows no hereditary or environmental setting for criminality. The first offense, that of stealing a horse, was solved by flight. The second offense, stealing sacramental wine, resulted in a five-year sentence, following which the patient embarked upon a long career of wandering and swindling, during which time he suffered much mental anguish because he had contracted syphilis. The author epitomizes the case as follows: "In the whole reaction one finds an over-compensation for a deep sense of defeat." Case II, diagnosed as psychopathic personality without psychosis, had a background of hereditary physical factors plus a disrupted home. Nomadism, larceny, and forgery constitute the greater part of his history. The author summarizes the case as typical of "the class of drifters whose life is one long childhood—whose emotional life does not keep pace with their mental life—who continue to repeat offenses—never profit from experience—they are emotionally unemancipated." Case III, diagnosed psychopathic personality with psychosis, situation psychosis, represents "an instance of criminality flowing out of homosexual difficulties" culminating in arrest in the army with the development of acute psychic reaction to imprisonment. Case IV, diagnosed as psychopathic personality without psychosis, presents a history so interwoven with fantasy that little factual material is known. Incessant vagabondage and participation in crime by force of circumstances characterize his life. The author concludes that the case illustrates "that emotional entanglements may lead an individual into personal and social difficulties of which criminality may be one expression." Case V, diagnosed as psychosis with psychopathic personality, with a neurotic heredity and a sickly childhood, early became a predatory criminal, wandering back and forth over the country. The author concludes the case with the statement that "the case suggests that criminality may develop as an emotionally conditioned reaction" which, uncorrected at the proper time, "becomes structuralized into a fixed form of behavior." Each case history is essentially a narrative of various social, criminal, and sexual events in the life of the patient.—*M. H. Erickson* (Worcester State Hospital).

5942. **Kleinschmidt, —. Neuere Versuche zur Förderung der Vernehmungstechnik.** (Newer experiments on technical improvements for examining prisoners.) *Krim. Monatsh.*, 1933, **7**, 58–61.—A report of the Berlin Polizeiinstitut concerning mechanical methods of recording testimony. The sound

film would be ideal, but is as yet too expensive. Phonograph recording is now technically practicable, and its extension is limited only by cost. Although the first effect on examiner and prisoner is inhibiting, an indisputable record may be a protection to both. Phonograph records are also an important means of instruction for students and examiners, giving the latter their only opportunity to evaluate their technique objectively. In summary, the mechanical protocol excludes the endless sources of error inherent in the working-up of written testimony, and avoids the irreparable loss of important material which, with the usual methods of examination, passes unobserved.—*M. E. Morse* (Catonsville, Md.).

5943. **Kline, L. W., & Carey, G. L. A measuring scale for free-hand drawing. Part II. Design and composition.** *Hopkins Univ. Stud. Educ.*, 1933, No. 5. Pp. 58. $1.75.—The authors present here the second part of their drawing scale (the scale for representation was published in the same series in 1922). The themes for the present scale are: illustration, poster, border, and structural design. The 35,094 children's drawings from which the present scales were made were collected from schools in 12 cities in 8 states. 84 judges rated the samples; of these, 7% had had no academic art training, 12% were public school teachers with one or two terms of art, and the remainder were artists or teachers and supervisors of art. Definite instructions for scoring the drawings were given, and the cardinal principles of design (balance, rhythm, subordination, opposition, and unity) were defined to insure consistency. From these judgments 63 drawings for each of the four themes were selected as exemplifying the whole range; these were then rated by the judges in "order of merit" and the percentage rank of each specimen determined. From these rankings the PE values were computed, and 11 drawings selected for each theme, as representative of the total range of performance. The four scales are reproduced in black and white at the end of the monograph. The function and uses of such a scale are discussed, and art instructors are asked to send in drawings in order that grade and age norms may be determined.—*D. E. Johannsen* (Skidmore).

5944. **Lambeth, M., & Lanier, L. H. Race differences in speed of reaction.** *J. Genet. Psychol.*, 1933, **42**, 255–297.—It has been held that the racial differences found on many psychological tests are essentially differences of speed; which view, especially as stated by Klineberg, is here critically and experimentally analyzed. The Stanford-Binet scale, a rational learning test, and six tests of rate of response were applied to 30 white and to 30 negro 12-year-old boys. Comparisons show that the more complex the test, the higher the relative score made by the whites; and, since there is roughly a parallel increase of speed difference in their favor, it follows that the theory of a general speed difference between the races is untenable. Intercorrelations between the various tests are found to be higher for the negroes, possibly indicative of a more primitive and less differentiated type of mental organization.—*J. F. Dashiell* (North Carolina).

5945. **Legrün, A. Spiegelschrift bei Schulneulingen.** (Mirror writing in children who have just entered school.) *Zsch. f. päd. Psychol.*, 1931, **32**, 547–557.—Children who had just entered school and had never been taught reading or the writing of figures were asked to write figures which they knew. All of the children were able to write some figures; 20% in one class and 11% in another used mirror writing in making the figures. A second experiment six months later showed that the frequency of reversed figures had decreased considerably, although the school work had been on the learning of the alphabet rather than of figures.—*M. G. Willoughby* (Clark).

5946. **Lesser, A. Cultural significance of the Ghost Dance.** *Amer. Anthrop.*, 1933, **35**, 108–115.—The author supplements Mooney's exhaustive account of the Ghost Dance of 1890–4 with notes on the later effects of this movement on the American Indians of the West. The Ghost Dance was an important ethnological phenomenon, which checked the decay of tribal cultures and involved among some tribes a genuine renaissance, as among the Pawnees. Not only were old activities and tribal ideals revived, but much ceremonial paraphernalia which had gone out of use was duplicated from memory and vision, stimulated by hypnotic trance and the communal enthusiasm of the dancers.—*C. M. Diserens* (Cincinnati).

5947. **Levy, J. The homeless boys retreat.** *Ment. Hygiene*, 1933, **17**, 369–373.—The author comments on his interviews with some of the quarter million homeless boys wandering throughout the States. He points out their essential loneliness and seriousness; and he suggests that as they grow older they may become more serious as social problems.—*O. L. Harvey* (Boston, Mass.)

5948. **Liao, W. K. The individual and the community.** New York: Harcourt, Brace, 1933. Pp. xv + 314. $3.75.—"By taking the historical approach and using the comparative method, the whole study has aimed to trace how thinkers in the West and the East have attempted to analyze the motivating factors of social conduct as judged to be either moral or legal or both." The author concludes that although culturally determined, the individual may through chance factors guide the community.—*D. Katz* (Princeton).

5949. **Lowie, R. H. Erland Nordenskiöld.** *Amer. Anthrop.*, 1933, **35**, 158–164.—An obituary of one of the greatest modern students of primitive peoples. His work on the ethnography of South American Indians is noteworthy. He demonstrated significant positive correlations between geographical environment and culture, and in comparative ethnography brought cartographic technique to perfection. A four-page bibliography of Nordenskiöld's writings is appended.—*C. M. Diserens* (Cincinnati).

5950. **Lowie, R. H. Queries.** *Amer. Anthrop.*, 1933, **35**, 288–296.—This paper consists of comments and criticisms on a number of controversial questions

in anthropology, such as the nature of cultural stability, evolution and the *Kulturkreislehre*, irreversible diffusion of culture from higher centers, the value of conjectural history in comparative sociological studies, the meaning of sociological law, and the attitude of anthropologists toward the researches of their predecessors. The author apparently convicts several eminent modern anthropologists of inconsistencies, and warns against a hostile or ultra-critical attitude toward the observations and reports of older writers.—*C. M. Diserens* (Cincinnati).

5951. **Luria, A. The second psychological expedition to central Asia.** *Science*, 1933, **78**, 191–192.—This expedition extended the research undertaken by the first expedition in 1931. The fundamental aim was the study of those peculiarities of the psyche which are the result of various historical conditions and to trace the fundamental laws of development of the psychological processes. The dynamics of transition from the more elementary laws to the more complex processes comprised an important part of the research. Youths as well as adult populations were studied. The specific problems undertaken and plans for further work are presented.—*P. Seckler* (Radcliffe).

5952. **Marcus, G. The individual and his family relationships.** *Ment. Hygiene*, 1933, **17**, 353–368.—An interpretation of some newer concepts in social case work. The main theme of this article is that the case-worker should not attempt to direct the thought of the interviewee, even by direct questioning, but rather should remain silent and thus guarantee the latter "emotional immunity" by virtue of which he may resolve his own problems in the presence of an utterly impartial yet sympathetic listener.—*O. L. Harvey* (Boston, Mass.).

5953. **Mayer, J. Toward a science of society.** *Amer. J. Sociol.*, 1933, **39**, 159–179.—*Crime, Law, and Social Science*, although the outcome of a three years' survey of criminology and criminal justice in the United States and abroad by an eminent group of scholars in various social and allied fields, is the work of only the director and one member of the survey staff. The main conclusion of the book is that criminology is not now a science, that investigators in psychology and sociology, upon which it depends, are incapable of doing scientific work, and that the only hope is to draft specialists from mathematics and the physical and biological sciences to apply scientific method to social study. In supporting their contentions the authors are ambiguous in their definition of the nature of science; they overemphasize the rational phase in their discussion of scientific method; and in their distinctions between independent and dependent empirical sciences they ignore the fact that the sciences are essentially interdependent, constituting a structural and genetic whole, and containing immature as well as mature elements. Specialists in the fields of chemistry, physics, and mathematics are prone to see social phenomena through the eyes of their specialties alone and fail to make analysis of those variables which are unique in social relations. The authors' analysis of what they regard as five misconceptions regarding the nature of a science of society indicates rather the relative complexity of the subject matter and the immature condition of social studies. It should not be regarded as indicative of the impossibility of doing scientific work in the social studies.—(Courtesy *Amer. J. Sociol.*).

5954. **McCartney, J. L. Classification of prisoners.** *Psychiat. Quar.*, 1933, **7**, 369–377.—In this article by the director of the classification clinic of the Elmira Reformatory, some very important facts as a result of the study of over 1000 new cases admitted last year have been revealed. The superintendent, Dr. Christian, has publicly stated that this psychiatric work has assisted in the handling of the problems of administration. The author believes that if the classification routine which he has outlined could be carried out less than one third of the present population of this institution would require incarceration in individual cells. This method would not only benefit the prisoners themselves but would also reduce the state expense. One of the greatest handicaps to progress in the psychiatric handling of prisoners in New York state, the writer believes, is the fact that legal regulations make it impossible to parole an inmate when he is ready to be paroled, and also prevent the institution from holding potentially dangerous prisoners for an extended period. An indefinite stay in a correctional institution should be prescribed, and the term should depend upon the individual's behavior.—*E. T. Burr* (Vocational Adjustment Bureau).

5955. **Mead, M. More comprehensive field methods.** *Amer. Anthrop.*, 1933, **35**, 1–15.—The history of ethnographic field work has involved much discussion as to which departments of human life are to be regarded as culture and which may be ignored under the heading of "psychology" or "private life." Thus a monograph may dismiss family relations or child training with scant notice. Nor is there any systematic notion of what questions should be asked or of the topics treated, accident and convention rather than a logical analysis of the nature of culture having often determined the matters actually treated. Moreover, unformalized aspects of culture are neglected, and where a series of forms, as in religion, is clearly recognized, insufficient attention is given to variation of method required by various forms of the same phenomenon. Mead gives many examples of errors in conception, method, and criticism on the part of ethnologists, and declares that "In order adequately to describe primitive cultures, it is necessary to extend the present narrow, accidental and inadequate rubrics under which most investigators have been accustomed to collect and present their data. The whole of man's life is determined by his culture, and every aspect of it, the unformalized, the uninstitutionalized, is as important to an understanding of the whole as are the traditional institutions."—*C. M. Diserens* (Cincinnati).

5956. **Molnar, E. Die Einstellung der Persönlichkeit und die Kunstbetrachtung.** (Personal attitude and views on art.) *Arch. f. d. ges. Psychol.*, 1933,

87, 231–286.—Whereas such sciences as physics and botany not only can but in principle must neglect psychological factors in the observer, esthetics with equal necessity must include them. There are no purely objective values in art; much if not everything depends upon the mental set or attitude of the observer. This in turn is dependent upon the conditions prevailing at the time he observes: the dramatic principles set forth by Aristotle could not again be fully appreciated until the period of French classicism. Nor is attitude a matter of human judgment per se, for its variations among individuals and even in the same person at various times is exemplified by the varying judgments of beauty which one encounters. There is no such thing as "eternal beauty"; fixed esthetic norms are impossible.—*W. D. Ellis* (Mass. State College).

5957. **Moos, J. C. Some recent developments in music testing.** *Mus. Quar.*, 1933, **19**, 318–330.—The author of *The Yardstick Applied to Musical Talent* criticizes adversely the following tests: Seashore, Schoen, Trabue, Vernon, Wilson, Adler, and Hevner. He praises the Kwalwasser-Dykema battery. —*P. R. Farnsworth* (Stanford).

5958. **Ortmann, O. Notes on education in music.** *Peabody Bull.*, 1929, **25**, No. 2, 5–6; **26**, No. 1, 9–11; 1930, **26**, No. 2, 7–9.—Only music education of the proper sort can eliminate undesirable features of present-day music, some of which are: undue stress on loudness in singing and playing, jazz, superficialities in the appreciation of music, and tendency to rate music teachers according to academic training alone. The conservatory of music can bring about an improvement in standards. As a result of recent mechanical developments and economic changes, music education should aim to encourage and improve musical activity and appreciation on the part of the many, rather than to concentrate on the highly specialized development of a few. The fine arts offer an excellent field for adult recreation, but they demand training, and the intermediate grades of music are useful for this. Education in music is justified by the fact that it makes life more livable. It has (1) an individualistic value in that each student actually makes music, (2) a social value in the great possibilities and values of group music, (3) an emotional value in that it gives pleasure and provides a socially acceptable means for emotional expression, (4) an intellectual value in that hard work and discipline are needed to accomplish anything of lasting value, (5) a cultural value in that it develops distinctions of taste, and (6) to some it has a professional value. A "little concert" movement is desirable to offset present emphasis on size of audiences, orchestras, halls, voices, etc.—*L. Petran* (Peabody Conservatory of Music).

5959. **Ortmann, O. Notes on jazz.** *Peabody Bull.*, 1931, **28**, No. 1, 11–17.—Jazz is characterized tonally by (1) the predominance of noise elements, (2) the predominance of high pitches over low, (3) sliding intonation and the playing of some phrases "flat" to give a "blues" effect, and (4) chromaticism. Rhythmic characteristics are (1) syncopation, (2) the break—a short cadenza played (or acted) during a cadence, and (3) a constantly reiterated drone-bass. Main harmonic ingredients are chords of tonic, dominant, added sixth, and dominant ninth. These features are not new, but rather are among the oldest known to music, and most have been rejected: i.e., development of instruments is away from noise and toward exactness of intonation, and the harmonies are hackneyed and so is the device of the cadenza. In most features jazz is markedly like primitive music, and because this is associated with lack of repression jazz may thereby have acquired its recreational value. Jazz cannot develop into good music because as soon as it does it ceases to be jazz.—*L. Petran* (Peabody Conservatory of Music).

5960. **Ortmann, O. Creative music in the school curriculum.** *Peabody Bull.*, 1932, **28**, No. 2, 7–10.—Musical creativeness of artistic value should not be expected of children in the primary grades because their auditory vocabulary is small and the proportion of pupils capable of doing worth-while work limited. Manufacture of musical instruments by children may have value for manual training, but hardly for music, as such instruments have poor tone, uncertain pitch, and limited range. Symphonies made from children's themes usually owe most to the creativeness of the teacher who puts the themes together. Instead of creativeness, impression and retention of good musical models should be stressed.—*L. Petran* (Peabody Conservatory of Music).

5961. **Ortmann, O. Notes on interval discrimination.** *Peabody Bull.*, 1932, **28**, No. 2, 45–46.—Ear training classes were tested for recognition of musical intervals in which both tones were sounded simultaneously. Over 5000 judgments were taken. It was found that (1) recognition of interval is a memory function improving with length of study; (2) errors are not uniformly distributed, but are most often made on minor sixths, sevenths, and thirds, and on augmented fourths; (3) minor intervals are uniformly more difficult than major; (4) errors are of two types, one based on nearness in pitch, the other on nearness in blending; (5) the type of error varies with the interval. Suggestions for teaching are deduced.—*L. Petran* (Peabody Conservatory of Music).

5962. **Ortmann, O. In forty years.** *Peabody Bull.*, 1932, **29**, No. 1, 3–16.—An analysis was made of the frequency with which various composers were represented from 1890 to 1930 on the programs of a recital series displaying all types of music except oratorio, opera, and symphony. Curves are given for many composers, and the works of some of them are declining in frequency of appearance in a manner similar to the curve of forgetting. German composers are represented much more often than all others, except during the war. From these curves the life-span of a composer's works may be estimated. The author concludes that nationalism in music is a transient phase and that cosmopolitanism of idiom, rather than

individualism, produces works of lasting value.—*L. Petran* (Peabody Conservatory of Music).

5963. **Ottolenghi, S. Il "delinquente per tendenza" nel C.P.R. e in antropologia criminale.** (The congenital delinquent in the C.P.R. and in criminal anthropology.) *Zacchia* (Roma), 1931, 1–11.—The congenital delinquent of the C.P.R. is similar to the delinquent through "attitude vivée" of the Ottolenghi classification. Propositions are given for the rapid and valid application of the law.—*R. Calabresi* (Rome).

5964. **Perrando, G. G. Sull' indole giuridica della perizia psichiatrici.** (On the judicial character of the psychological examination.) *Gius. penale*, parte I: I presupposti del diritto e della procedura penale, 1932, **38**, fasc. I-II.—According to the new Italian penal code, evaluations on imputability, especially if they are strictly related to subtle psychophysiological questions, are dependent upon the competence of the judge, who must not only set the penalties for the abstract kind of offense, but must also concern himself with the individualization of the penalty. It is just the current tendency to individualization of the penalty which calls, at least to a certain degree, upon the intervention of mental medicine. Medicine can recognize the degree of mental infirmity, explain the psychophysiological mechanism which has led the accused to the offense, to establish whether it is chronically or temporarily dangerous; but it cannot assert itself in the case of imputability (capacity to understand and to decide). Actually the positivist conception of imputability is in contrast to the ethical principles of society, and inadmissable from the practical point of view; whence the necessity that legal medicine should really be the collaborator of the judge, and that it should be able to influence his verdict in ethico-philosophical emergencies of actual legislation. The expert psychiatrist cannot base his judgment only on biological principles; psychiatrical examination must necessarily refer to that which the legislator understands in this group of faculties which we call the capacity to understand and to decide. On the other hand these numerous psychological interferences compel the judge to have a new and complete biological and anthropological culture.—*R. Calabresi* (Rome).

5965. **Petran, L. Mountain tunes; a neglected feature of American music.** *Peabody Bull.*, 1932, **28**, No. 2, 19–24.—The music of the Southern Appalachian mountaineers has been more neglected by concert performers and composers than any other "native" American music. Fortunately some fine collections of these tunes have been made. Their historical and environmental background is discussed. The tunes are usually sung to little or no accompaniment, versions of the same tune vary a great deal, the phrase structure is usually simple, and there is a great variety in the modes represented but less in the rhythms and harmonies actually used. The tunes offer striking possibilities for development into cultivated music, but these possibilities are not likely to be realized, since economic and sociological changes favor neither the preservation of these tunes nor a growth of their influence.—*L. Petran* (Peabody Conservatory of Music).

5966. **Poffenberger, A. T. Transplanting our minds.** *Scient. Mo.*, 1933, **37**, 64–67.—There never was such a need as at present for leaders who could see through other people's eyes.—*J. F. Dashiell* (North Carolina).

5967. **Pressey, S. L., & Pressey, L. C. Results of certain honesty tests given to a group of rural white children and to two groups of Indian children.** *J. Appl. Psychol.*, 1933, **17**, 120–129.—Three group tests for measuring honesty in scoring an arithmetic paper, in handling money, and in keeping eyes closed when instructed to do so while drawing around a square, and an individual test in which the subject is required to make a record of results obtained on a hand dynamometer were administered to white and Indian children in the 3rd, 4th and 5th grades. Dishonesty is greatest in keeping the eyes closed task, a situation for which there has been no specific training. There is a decrease of dishonesty with age. Indian children appear to be less honest than whites. Among the Indian children those who have had a greater opportunity to adopt "white standards" are less dishonest.—*R. S. Schultz* (Psychological Corporation).

5968. **Rogge, C. Selbstbewusstsein und Sprache.** (Self-consciousness and language.) *Arch. f. d. ges. Psychol.*, 1933, **87**, 299–304.—Nietzsche was correct in emphasizing the close relation between language and consciousness. The speaker is both speaker and hearer and thus joins other hearers in standing apart from and observing himself. This is the nature of consciousness; it is a mirror into which we continually gaze. We indicate this duplex character whenever we make such remarks as "*I* blame *myself* for this," etc. Speech and thought are inseparably one.—*W. D. Ellis* (Mass. State College).

5969. **Roback, A. A. [The intelligence of Jewish children.]** *Unser Shul*, 1933, **3**, No. 1, 1–6.—A semi-popular review of some of the literature on test findings with an attempt to account for the superiority shown.—*D. Shakow* (Worcester State Hospital).

5970. **Roberts, H. H. Form in primitive music.** New York: Norton, 1933. Pp. 190. $3.00.—*R. R. Willoughby* (Clark).

5971. **Sarkar, S. L. The psychology of taking prasad.** *Psychoanal. Quar.*, 1933, **2**, 315–317.—"Prasad" means food remains of a god or a superior person or the attributes thereof. A neurotic male, separated from his wife and living with a prostitute, took the prasad of his mistress. His entire character changed and he returned to his wife. Analysis disclosed a strong Œdipus complex from which he was released by this symbolic act, the underlying mechanism of which was found to be the introjection of his mother.—*M. H. Erickson* (Worcester State Hospital).

5972. **Seagoe, M. V. Factors influencing the selection of associates.** *J. Educ. Res.*, 1933, **27**, 32–40.—The problem was to answer the following questions: is the child an active agent in the selection of asso-

ciates, how much is due to propinquity, and is similarity or dissimilarity the more important in such selection? A preliminary study of 142 boys and girls and a final study of 823 children from grades 3–8 from the Garvey district in Los Angeles county were made, in which the children were asked whom they would ask to a party. The same question was asked one month later. A treatment of results by the correlation method indicates that propinquity is a strong factor in the selection of associates, and that similarity is more important than dissimilarity.—*S. W. Fernberger* (Pennsylvania).

5973. **Seelig, E. Das Typenproblem in der Kriminalbiologie.** (The type problem in criminal biology.) *J. f. Psychol. & Neur.*, 1931, **42**, 515–526.—After a review of the classifications that have been attempted both in criminology and in general characterology, the author deems it impossible to divide criminals into classes, and proposes eight types, the characteristics of which are met to some extent in every delinquent: the idlers; those tempted by the occasion; the aggressive; the erotic; those who cannot find a solution for their problems; the violently passionate; those dominated by their feelings (e.g., the servant who sets a fire in order to be returned to her home, for which she has been longing); and those who act from conviction (pure cases extremely rare). Seelig also mentions the clearly abnormal—the ill, the psychopathic, the ineducable; as to physical signs, they may aid in the understanding of a particular case, but furnish no general index of propensity to crime.—*M. G. Willoughby* (Clark).

5974. **Sorokin, P. A. Studien zur Sociologie der Kunst: I. Die Reihenfolge der Kunste im kulturellen Lebensprozess.** (Studies in the sociology of art. I. The rank of arts in the process of cultural life.) *Sociologus*, 1933, **9**, 45–65.—The problems of whether there is a uniform sequence in the development of various forms of art in different cultures, and whether certain stages in art correlate with certain stages in culture, were investigated, with negative findings. Various cultures showed different sequences in the development of art; no universal uniformity could be discovered.—*E. Fehrer* (Bryn Mawr).

5975. **Stanton, H. M. Quantitative yard-stick for the measurement of musical capacity.** *Eug. News*, 1933, **18**, 78–81.—This is a very brief history of the experimental study of musical talent in America, with emphasis on the description of the Seashore Measures of Musical Talent. The six musical capacities tested may be interpreted by school grades and adult norms in terms of centile ranks, which may be "further interpreted in terms of classified individual talent profiles . . . The results of these tests are not affected by musical training, age, or intelligence" nor do they tap "the whole gamut of musical potentialities." The author "found that a large percentage of students with high musical capacities as measured are productive in musical expression" and "that only a very small percentage of students with low capacities as measured reach a stage of recognizable musical expression, regardless of other advantageous factors they may possess." A bibliography of 8 titles is appended.—*M. V. Louden* (Pittsburgh).

5976. **Stouffer, S. A. A technique for analyzing sociological data classified in non-quantitative groups.** *Amer. J. Sociol.*, 1933, **39**, 180–193.—For statistical treatment of sociological data when the dependent variable is on a quantitative scale and the independent variables are not, it is first important to test the significance of the difference between means in subclasses. By new and simple procedures the significance of the sums of differences between averages and of differences between differences, holding constant other factors, may now be tested. Application of these procedures to test scores on attitudes toward prohibition of 238 students of the University of Chicago in 1929 shows that, taken as a whole, the men were wetter than the women; students whose fathers were not reported as voting dry were wetter than students whose fathers were reported as voting dry; and students from neighborhoods not reported as dry were wetter than students from neighborhoods reported as dry. In each case the other two factors were held constant. Application of the same procedures to case-history ratings led to nearly identical conclusions, indicating that as far as results were concerned it made little difference whether test or case-history methods were used.—(Courtesy *Amer. J. Sociol.*)

5977. **Stransky, E. Religion und Psychopathologie.** (Religion and psychopathology.) *Zsch. f. Religionspsychol.*, 1933, **6**, 97–113.—"Religion in itself, this 'metabiontical determinant in human life' (Beth) is nothing pathological, and also the enormous number of quantitative and qualitative differences of the psychic radicals of the religious complex are normal psychic phenomena."—*A. Römer* (Gautzsch bei Leipzig).

5978. **Strasser, C. Aberglaube, Kurpfuscherei, Seelenheilkunde.** (Superstition, quackery, mental therapy.) Zürich: Genossenschaftsbuchhandlung, 1932. Pp. 315. 3.60 fr.—A series of lectures against modern forms of superstition and magic methods, among which are included suggestion, hypnosis, psychoanalysis, and psychometrics.—*K. F. Muensinger* (Colorado).

5979. **Talbert, E. L. On Francis Galton's contribution to the psychology of religion.** *Scient. Mo.*, 1933, **37**, 53–54.—Galton applied objective methods to the objective efficacy of prayer, sought explanation of visions in the known mechanisms of mind, found divines more sickly than other professional men, and found excessive piety related to sexual disorganization.—*J. F. Dashiell* (North Carolina).

5980. **[Various.] Symposium on the observability of social phenomena with respect to statistical analysis.** *Sociologus*, 1933, **9**, 1–27.—A series of evaluations and criticisms of Miss Thomas' techniques for the measurement of social behavior form the bases of the different authors' theories of social measurement. II. Chapin, F. S., *Observation and Measurement in Sociology:* The distinction between units of observation or those attributes of the subject selected for

study and the actual units of measurement must be drawn. III. Woodard, J. W., *Five Levels of Description of Social-Psychological Phenomena:* These levels range from the description of the subject's movements in time and space, to the determination of the motives for movement, be these conscious or unconscious. IV. Rice, S. A., *A Conciliatory View of Statistical and Case Methods in the Study of Social Behavior.* V. Wilson, E. B., *Some Immediate Objectives in Sociology:* Essential today are the definition of immediate objectives, a more patient effort in obtaining these, and a greater restraint from running ahead into precarious advanced positions. VI. Adler, M. J., *A Determination of Useful Observables:* In addition to being valid and reliable, the data of observation should be useful, that is, capable of interpretation, and this can occur only when observation is preceded and prescribed by theory, and statistical treatment is guided by rational formulations.—*E. Fehrer* (Bryn Mawr).

5981. **Wessinger, J. D. Ueber den Selbstmord bei Frauen in den ersten zehn Jahren nach dem Kriege.** (Suicide in women during the first ten years after the war.) Berlin: R. Schoetz, 1933. Pp. 34.—*R. R. Willoughby* (Clark).

5982. **Wood, A. E. Difficulties of statistical interpretation of case records of delinquency and crime.** *Amer. J. Sociol.*, 1933, **39**, 204–209.—The scientific value of case records has been discredited on the ground that the paucity of records prevents their reliable statistical use. Moreover, the statistical units extracted from the records have no meaning apart from their context. As illustrations of individual life-patterns and situations they have value as contributions to an understanding of life. If a given set of cases were identical in their component elements, a complete, accurate description of one would give as much as would statistical generalizations concerning the total number. In a number of cases, major aspects, likenesses, and differences might be distilled from a mass of irrelevant detail and the conclusions reduced to a statistical basis. But a careful scrutiny of records would be necessary to reveal qualitative as well as quantitative differences and make prediction valid.—(Courtesy *Amer. J. Sociol.*)

5983. **Zimmerlein, K. Verschmähte "lesbische" Liebe als Brandstiftmotiv.** (Repulsed Lesbian love as a motive for arson.) *Krim. Monatsh.*, 1933, **7**, 112–113.—This is a very rare motive for arson. In the present case, the daughter (A) of the man whose house was burned and a friend (S) had been carrying on a homosexual relationship for eight years. Two months before the fire, A gave this up because she had become engaged. S showed no resentment at the time. On cross-examination she described the deed, which she had carried out deliberately after minute preparations. Its commission was apparently followed by a short period of confusion associated with the idea of suicide by drowning.—*M. E. Morse* (Catonsville, Md.)

[See also abstracts 5576, 5584, 5759, 5761, 5763, 5767, 5772, 5785, 5789, 5790, 5803, 5804, 5807, 5822, 5846, 5862, 5863, 5881, 5893, 5902, 5909, 6014, 6018, 6023, 6025, 6026, 6030, 6033, 6035, 6036, 6045, 6048, 6050, 6060, 6072, 6107, 6110.]

INDUSTRIAL AND PERSONNEL PROBLEMS

5984. **Baumgarten, F. Die soziale Seite der Psychotechnik.** (The social side of psychotechnics.) *Soc. Praxis*, 1931. Pp. 18.—The author points out the increasingly important position of psychotechnics in social life, together with the resistances which it encounters and the difficulties which attach themselves to social organizations. However, the methods are still inadequate and it is impossible to be certain of results, especially in the process of selection.—*M. G. Willoughby* (Clark).

5985. **Budkiewicz, J. [Series of professional tests of the Municipal Psychotechnical Laboratory of Warsaw.]** *Polskie Arch. Psychol.*, 1931, **4**, 221–273.—This, besides being an account of the work of the laboratory in 1929–30 and 1930–31, is a methodological study of certain tests of the applied series. After giving professiograms of the trades studied (sewing, making underwear, embroidering), and a table of tests for each profession (theoretical and practical intelligence, observation, spatial representation, graphic aptitudes, tastes and artistic attitudes, motor functions), the author sums up current tests and describes in detail the five that are used in the laboratory. They are: (1) Baley's description of an image—for all three professions; (2) comparison of two drawings of dresses (enumeration of differences) —for seamstresses; (3) the author's test consisting of drawings of dresses from which the subjects are to match the back views with the correct front views —for seamstresses; (4) Baley's needle threading; (5) Baley's synthetic weaving test. The results of all of these tests except the needle threading are given in deciles and show a regular dispersion. A special study was made on a series of tests of qualitative appreciation, among which is the Baley weaving test. The subjects who do well in the tests outnumber those who do poorly; this is natural, as the members of the professions are selected. The author formulates some postulates relative to the verification of the test by dispersion of results, to the constancy of criteria, and to the corrections of the scale of marks conforming to the two preceding points.—*M. G. Willoughby* (Clark).

5986. **Darley, J. G., Paterson, D. G., & Peterson, I. E. Occupational testing and the public employment service.** *Bull. Employment Stabilization Res. Inst. Univ. Minn.*, 1933. Pp. 28.—A report, in bulletin form, of the one-year demonstration testing project carried on in the Minnesota public employment offices located in Minneapolis, St. Paul, and Duluth during the year ending July 1, 1933. The purpose of the project was to put into practice the theoretical and practical findings derived from the two occupational analysis clinics conducted by the committee in 1931–1932. The report is divided into 7 sections, as follows: (1) summary of results and recommendations; (2) the development of a community personnel program; (3) the place of occupational testing in the public

employment service; (4) a one-year demonstration; (5) the installation and administration of occupational testing; (6) looking forward; (7) industrial and social significance of occupational testing.—*H. W. Karn* (Clark).

5987. **Dulsky, S. G. Factors influencing the amount of copy read in "magazine" advertisements.** *J. Appl. Psychol.*, 1933, **17**, 195–204.—A new technique for measuring the amount of advertising copy read in looking through a magazine is demonstrated. The average person reads 5 to 10% of the copy of an ad and spends about 10 seconds looking at an ad. Younger people read less in an ad than adults. A smaller percentage of copy is read in the more wordy ads. More copy seems to be read on left-hand pages. —*R. S. Schultz* (Psychological Corporation).

5988. **Fraser, J. A. Mechanization and skill.** *J. Nat. Inst. Indus. Psychol.*, 1931, **5**, 442–449.—The author considers whether the progress of mechanization is really making human skill of less importance. There are many cases in which the efficiency of a machine depends completely upon that of its attendant. The opinion of an economist is cited to the effect that the progress of industry has changed the type of skill demanded, placing a premium upon ingenuity rather than purely physical dexterity. Work processes and learning in two industries are reviewed, and psychotechnicians are advised to study the separate industrial processes and to classify them according to the relative importance of the human factor.—*M. G. Willoughby* (Clark).

5989. **Green, H. J., Berman, R. I., Paterson, D. G., & Trabue, M. R. A manual of selected occupational tests for use in public employment offices.** *Bull. Employment Stabilization Res. Inst. Univ. Minn.*, 1933, **2**, 59–85.—This compilation of tests is one contribution of the Employment Stabilization Research Institute of Minnesota to the techniques that may be used for discovering quickly special types of work in which an individual applicant has a fair chance to achieve success. The tests were, with one exception, selected from among those that had been standardized and developed in previous investigations. The bulletin contains complete directions for administering and scoring the tests, together with norms by which an individual applicant's score on a test can be expressed in terms of a letter rating.—*H. W. Karn* (Clark).

5990. **Harding, D. W. Rhythm in typewriting.** *J. Nat. Inst. Indus. Psychol.*, 1931, **5**, 434–441.—Unknown words were presented to the subjects to be typed on a moving strip of paper. There were great differences in rhythm, and they were positively correlated with speed.—*M. G. Willoughby* (Clark).

5991. **Katzenstein, B. Die eignungspsychologische Erfassung des Arbeitscharakters. Problematik und Methodik. Unter besonderer Berücksichtigung der Eignungsuntersuchung von Büroangestellten.** (The psychology of aptitude with special reference to types of work. Problems and methods, with special attention to aptitude tests of office workers.) Leipzig: Barth, 1932. Pp. 71. RM 2.80.—This study sought to determine the usefulness and value of work analysis, not only in general, but for specific cases. Careful investigation was made of productivity, attitude toward the work and materials used in that work, the external characteristics of the occupation, types and distribution of errors, motives, method of working, etc. Numerous examples of investigations both of manual workers and of salesmen are given, but the formulation of a ready-to-hand method is based upon data obtained from office and clerical workers.—*B. Katzenstein* (Hamburg).

5992. **Katzenstein, B. Ueber Einprägsamkeit von Waren- und Firmenzeichen.** (The retention value of trade marks for goods and firms.) *Zsch. f. angew. Psychol.*, 1933, **44**, 245–272.—The psychology of advertising still operates with older concepts, such as attention, association, and habituation. Although the practical advertisers have advanced considerably beyond this level, with an intuitive grasp of the nature of the fundamental processes involved in advertising, scientific psychology has lagged behind. This study is an attempt to apply the Gestalt point of view to the field and to analyze the confusion of well-known trade marks. The material consisted of 450 trade marks which had appeared in a naming contest. The attitude of a person, his readiness to act in a certain way, are primary factors in the retention of trade marks rather than attention and association. 14 references. —*K. F. Muensinger* (Colorado).

5993. **Kekcheev, K. S. [The physiology of work.]** Moscow: Gosizdat, 1931. Pp. 274.—This book corresponds to a course given by the author at the University of Moscow for students in medicine, biology, and allied sciences. He considers the following principles fundamental: (1) for speed, load, and control of work there are optimal zones within which the human organism will work most efficiently; (2) the establishment of work norms, now set by engineers, should be effected in collaboration with physiologists; (3) it is necessary to study not fatigue as an isolated phenomenon, but the problem of productivity as a whole.—*M. G. Willoughby* (Clark).

5994. **Koch, H. Untersuchungen über den individuellen Arbeitsrhythmus an Landarbeitern.** (Individual work rhythms in agricultural workers.) *Psychotechn. Zsch.*, 1933, **8**, 17–24.—In order to detect, if possible, individual work rhythms, 22 farmers, varying from very weak to strong in bodily make-up, were tested in various types of agricultural work, such as hand mowing, sowing grain, etc. On the basis of these tests, the author concludes that persistent individual differences in work rhythms can be found, and that his subjects showed consistent trends in rhythms, so that they divided themselves into several rhythm types. Changes in conditions of work, temperature, atmospheric conditions, etc., all influence an individual's work rhythm, but they seem not to change it. Even extended rest pauses such as week-end interruptions have no effect on these rhythms. These farmers produced the most work when they were permitted to follow their natural

rhythms, while forced rhythms decreased their efficiency.—*C. Burri* (Chicago).

5995. **Konradi, G. [The present problems of the physiology of work.]** Leningrad: Regional library, 1931. Pp. 120.—The book contains chapters on the following topics: sketch of the physiology of muscular activity; theories of fatigue; the role of the nervous system in the physiology of muscular activity and in the appearance of fatigue; methods in the physiology of work; nervous pathways involved; intellectual work; practical problems in the physiology of work. The author recognizes a certain degree of subjectivity in the treatment of certain of the problems considered. —*M. G. Willoughby* (Clark).

5996. **Kowalski, W. [How can the diagnostic value of psychotechnical tests be increased?]** *Psychotech.*, 1931, **5**, 117–125.—Inadequacy of the diagnostic value of tests is due to our ignorance of the structure of aptitudes. The remedy is to investigate the theories which deal with them, particularly that of Spearman, of which a short survey is given. It is unlikely that technical tests, except those closely resembling the work itself, will reveal group factors (the tetrads being usually zero) and still more unlikely that they will show specific factors of importance. The correlation between tests and work capacity is due only to the factor *g*, general intelligence; it follows that to increase the diagnostic value of tests it is necessary to replace technical tests by tests of intelligence. Practically it is necessary to determine (1) the minimum intelligence requisite for a given profession; this can be done by investigating specific factors, by examining those who show themselves unfitted for the profession, and by determining the average intelligence of a large number of these, which will be below the minimum; (2) the optimum intelligence, which is not always the same as the maximum. In general, it is necessary to reexamine the requirements of the profession in order to place them on a structural basis.—*M. G. Willoughby* (Clark).

5997. **Krueger, F. [Ed.] Angewandte Psychologie.** (Applied psychology.) *Neue psychol. Stud.*, 1931, **5**, 351–470.—Contains articles by three workers in the field of psychotechnical examinations for chauffeurs. The first article, by Nicolas du Preez, gives the results of the author's work in analyzing certain qualities in the chauffeur which were previously unanalyzed. He discusses auditory orientation, twilight vision and depth vision, the visual field, and the ability to estimate speed. The second article, by A. Erhardt, is devoted to the phenomenon of Ranschburg, according to whom one prefers out of a series of stimuli those which differ from each other, and hesitates in his reaction with those which are alike or identical. The third article, by J. Herrman, treats the question of the significance of the individual equation in the activity of the chauffeur.—*M. G. Willoughby* (Clark).

5998. **Krüger, G. Analyse der Denkvorgänge beim Lesen von Werkzeichnungen.** (Analysis of the thought processes involved in reading mechanical drawings.) *Psychotechn. Zsch.*, 1933, **8**, 24–33.—The way in which one recognizes three-dimensional bodies from two-dimensional drawings may vary according to one's ability to perceive space and the amount of training in reading drawings. Perception of form occurs first through organization of single spheres, and the body is then built up by organizing each detail into a complete unit. By looking at a drawing we actually perceive nothing but a flat picture, which we fill in by memory and imagination. It is in this latter process that many people are weak or unaccomplished. They will have to fill in the picture step by step, while with others the mnemonic processes produce the necessary redintegrative functions immediately. There exist great individual differences between students in ability to reproduce bodies from drawings, and vice versa. In the teaching of reading of technical drawings one must use such methods as facilitate perception of form. Since this takes place through analysis, technical drawings should be taught in connection with geometry, because the latter seems to increase facility in perceiving space.—*C. Burri* (Chicago).

5999. **Macewicz, P. [The hygiene of office work.]** *Psikhotekh.*, 1931, **5**, 450–454.—Study and practical advice concerning conditions in offices: brightness (color of walls, placing of lamps), temperature and method of heating, humidity, ventilation, relations between the employees and the public, beauty.—*M. G. Willoughby* (Clark).

6000. **Mallart, J. La orientación profesional en España.** (Vocational guidance in Spain.) *Med. d. trab. e higiene indus.*, 1933, **5**, 33–92.—Juan Harte, in his book printed in the sixteenth century, pointed out some of the problems of a methodical analysis of aptitude. The phrenologists Cubi and Pujadas, in the nineteenth century, also pointed out the need of proper vocational guidance. In 1915 a secretariat of apprenticeship was established in Barcelona and supported by funds appropriated by the provincial government. One function of this office was the furtherance of vocational guidance. In 1918 this secretariat was transformed into the Instituto de Orientación Profesional. Ruiz Castella became the first director of the institute. In 1925 Mira succeeded to the directorship. In 1923, as a result of the law of 1922 concerning industrial accidents, the Instituto de Reeducación Profesional de Inválidos de Trabajo was formed, its prime function being the technical reeducation of those individuals injured in industrial activity. Two institutes ultimately arose, that of Barcelona and that of Madrid. Vocational guidance is a principal function. At present there are twenty laboratories of vocational guidance in Spain, all functioning under the leadership of the Madrid and Barcelona institutes. There is a bibliography of 48 titles.—*J. W. Nagge* (Chicago).

6001. **Mirk, M. Report on some results of vocational guidance given by the Australian Institute of Industrial Psychology.** *Aust. J. Psychol.*, 1931, **9**, 144–150.—Report on the results of a questionnaire concerning the present occupations of individuals to whom vocational guidance had previously been given.

It was found that 86.6% of the subjects had acted upon the advice given. Of these, 92.3% were wholly satisfied; 5.1% were partially satisfied; 2.6% were wholly unsatisfied. Of the subjects who had not acted on the advice 8.3% were satisfied, 25% partially satisfied, and 66.6% unsatisfied.—*M. G. Willoughby* (Clark).

6002. **Reitynbarg, D., & Makarow, I. Study of the efficacy of safety posters of positive and of negative content.** *Psikhotekh. i psikhofiziol. truda*, 1931, 16–22.—A group of twenty posters were chosen in such a way that each subject was treated on two posters, one with a positive content, showing the advantages of foresight, and the other with negative content, showing the unfortunate consequences of carelessness. The subjects who were used believed themselves to be alone but they were observed through a window. The amount of time spent with each poster was recorded. For all the subjects the average was 30% higher for the negative posters than for the positive. The content of the negative posters was also retained longer.—*M. G. Willoughby* (Clark).

6003. **Rodrigo, M. Algunos problemas de orientación profesional.** (Some problems of vocational guidance.) *Med. d. trab. e higiene indus.*, 1933, **4**, 93–160.—Probably 75% of workers are maladjusted in their occupations. This is frequently a factor in serious social discontent and in industrial accidents. Frois has attributed 43% of the accidents he studied to a lack of proper vocational orientation in the worker. According to the results of questionnaires given to children of both sexes between the ages of ten and sixteen years, there is surprising agreement among the children of the different countries as to choice of profession. Among the boys the career of engineer and among the girls the position of clerk in dress shops are highly favored. With advancing years the number of professions chosen as ideal by the child increases. There are many unanswered questions in regard to the technique of vocational guidance. At what age may an adolescent be safely oriented in regard to his vocation? Brewer has pointed out the dangers of a too early or of a too late orientation in this regard. Mauvezin has pointed out that the choice of vocation will influence the choice of studies to be pursued, hence vocational guidance should be offered between the ages of eleven and thirteen years. The author believes the offices of vocational guidance institutes should be available more than once and at different ages, since interests may change. Peixotto thinks that interests are definitely developed by the twelfth year. Thorndike has found that the vocational interest apparent in the last three years of elementary school is highly correlated with the profession chosen. The proper age for vocational determination is still an open question. The personality of the vocational adviser is important to the success of his task. He should have the advice of specialists in pedagogy, physiology, economics, sociology, and psychiatry. A study of 300 cases by the author seems to indicate that boys wish to pursue the professions of their friends rather than those of their fathers or brothers.—*J. W. Nagge* (Chicago).

6004. **Rupp, H. Aufgaben der Psychotechnik in Deutschland.** (Tasks for psychotechnics in Germany.) *Psychotechn. Zsch.*, 1933, **8**, 1.—Some of the most important and most immediately pressing problems to be studied by psychotechnologists in Germany are those of how to bring about vocational guidance and means for aptitude selection for academicians, how to acquire more accurate knowledge on how to develop leadership, and how to bring about satisfactory relationships between different groups and social strata. Along with this line of investigation comes also the problem of the psychology of the unemployed. Another big task is to study the fundamentals of motivation and its manifold applications in every-day life, especially in connection with the factory worker and other types of employees.—*C. Burri* (Chicago).

6005. **Rupp, H. Zur Berufsberatung für Abiturienten.** (Vocational guidance for graduates.) *Psychotechn. Zsch.*, 1933, **8**, 2.—Rupp describes the critical period in which college and university students find themselves as a result of the depression. He pictures the mental distress of these students because of uncertainty of employment. Since conditions are so much more serious than ever before, every student ought to obtain careful vocational guidance. For this reason three main types of vocational guidance procedures are suggested. The first would consist in aptitude and personality determination, with suggestions for vocations given by request only. In this case the subject chooses whether he wishes to use these guidance services. The second type of vocational guidance would be one managed entirely by a guidance committee. With this type the student is admitted to school or to any particular training course only by recommendation through the guidance office. Finally, with the third type of guidance, the student would have to take the tests, but he would be free to decide whether he wishes to follow the recommendations.—*C. Burri* (Chicago).

6006. **Sachsenberg, I. E. Versuche über die Einwirkung verschiedener Reize und Arbeitsbedingungen auf die Arbeitsleistung.** (Experiments on the effect of various stimuli and working conditions on efficiency.) *Psychotechn. Zsch.*, 1933, **8**, 6–17.—The problem was to determine how various factors of a working situation affect the workers' efficiency. A laboratory situation was established in which three types of activities were employed, one characterized by heavy physical work, another demanding close attention, and a third consisting predominantly of sensory activities. 46 workers were employed full time and paid for their services as subjects. The experimental conditions were made, as closely as possible, the same as in a factory, and in order to eliminate practice effects the workers performed the types of work in counterbalanced order. Some of the varying factors the effect of which were studied were: output records (how much work was done when they were given versus when they were not given); the distance of the workers from each other; time (knowledge versus no knowledge of time); various changing signals versus no signals; the speed of

changing work; the work rhythm and frequency of rest pauses; and several others. The general findings indicate that by varying any of these factors the workers' efficiency is affected: (1) There is an optimal distance between workers (200 cm.) which in this case gave the best performance. However, the effect varied from task to task. (2) Knowledge of time was better than no knowledge. (3) Signaling the approach of a new unit of work raises the amount of output as against the condition where the worker receives no such signal. Again, varying the length of the period intervening between the signal and the approach of the work unit influences efficiency. The maximum period was when the signal was given 40 seconds before the change. (4) Regularly occurring rest pauses were better than occasional ones. When several of these factors were combined into one situation the effect was not additive. For example, when several maximum conditions were combined the total increase in efficiency was smaller than the sum of the effects of the factors tested separately.—*C. Burri* (Chicago).

6007. **Simmat, R. Modern advertising.** *Aust. J. Psychol.*, 1931, **9**, 49–61.—Since advertising is becoming more and more important, it should be more carefully studied before a campaign is launched. This study should take into account the complete course of production and distribution of the commodity, particularly the actual conditions of the sale. Direct contact with consumers, as by questionnaires, is favored as a means of sounding out possibilities for a new product; the choice of periodicals for advertising, etc., should be based upon such data. The author concludes with a few remarks upon the present depression and its relations to advertising.—*M. G. Willoughby* (Clark).

6008. **Spielrein, J. [The situation on the psychotechnical front.]** *Psikhotekh. i psikhofiziol. trudi*, 1931, **4**, 103–111.—Psychotechnics is brought into relation with Marxism. Psychology is seen as the study of consciousness, "which not only reflects the objective world but also creates it." Psychotechnics should clarify its theoretical bases and in its orientation should approach general psychology. On the practical side, it should cooperate in the social work of the USSR, the immediate task being to combat the methods used by the bourgeois classes. Intelligence tests, since they stress scholastic acquisitions, are a dangerous falsification, and it is equally dangerous to consider men at work as living machines; the question of stimulants cannot be neglected. The Soviet reorganization of life brings forward new forms of work, which set new problems for the psychotechnician.—*M. G. Willoughby* (Clark).

6009. **Troina, F. Sulle alterazioni dell' udito nel personale aeronavigante.** (On disturbances of hearing in the personnel of aerial navigation.) *Valsalva*, 1933, **9**, 337–353.—In his statistical studies the author has not verified in the personnel of aerial navigation the preponderance of acoustic lesions of the left ear which has been recognized by others. On the basis of the clinical picture in several cases of permanent hypacusia in aviators and for the sake of comparative considerations the author affirms the existence of a professional deafness in aviators, although for the moment we do not possess complete observations on the physical characteristics of the acoustic breakdown caused by the hum of the motor.—*R. Calabresi* (Rome).

6010. **Tyrrell, D. An activity analysis of secretarial duties as a basis for an office practice course.** *J. Exper. Educ.*, 1933, **1**, 323–340.—An attempt to determine the content of an office practice course in a junior college secretarial curriculum by evaluating secretarial duties found in the list compiled by Charters and Whitley and reported in their study *Analysis of Secretarial Duties and Traits.* In addition to the frequency rating already available in the Charters and Whitley study, the three additional criteria used in *The Commonwealth Teacher-Training Study*, by Charters and Waples, were applied. These criteria are: I (importance), D (difficulty), and S (desirability of pre-service training). Scores were obtained in the present study for I, D, S, and F (frequency) and combined to give a composite score (C) for each duty. The various secretarial duties were then ranked on the basis of the C-scores.—*H. W. Karn* (Clark).

6011. **Urbányi, J. A reklám lélektana.** (Psychology of advertising.) *Magyar Psychol. Szemle*, 1932, **5**, 68–85.—The author discusses in detail the second of the three methods which are used for studying the effectiveness of advertising: (1) introspection, (2) laboratory experiment, (3) experiment in the setting of every-day life. The results obtained by this method may be analyzed from the standpoint of the means of advertising and of the effects of advertising. The analysis of means of advertising into separate factors (e.g. color, shape, duration, ideational and emotional contents) proves unsatisfactory, because of the synthetic character of the advertisement. The analysis of the effects of advertising has a greater practical value.—*D. Shakow* (Worcester State Hospital).

6012. **Valentiner, T. Ueber Sorgfaltsanalyse.** (On the analysis of care.) *Zsch. f. pād. Psychol.*, 1931, **32**, 263–274.—To diagnose care, the author uses work tests (bending of wire and drawing) and shows that the results are satisfactory provided the judgment is not based on the product, which is also dependent on the capacity of the subject, but solely by his behavior during the experiment; a very bad product can emerge from a very careful and scrupulous effort. Further, the observation should be made during a period of some considerable extent, say several hours. Under these conditions, the correspondence of the test results with the judgments of work supervisors is completely satisfactory.—*M. G. Willoughby* (Clark).

[See also abstracts 5592, 5656, 5820, 5864, 6111.]

CHILDHOOD AND ADOLESCENCE

6013. **Arlitt, A. H. Adolescent psychology.** New York: American Book, 1933. Pp. 250.—Written from

the genetic point of view, this book is designed as a text for use in college educational courses. It follows the conventional set-up of most of the books in this field, with somewhat more than average emphasis placed upon the problems of mental hygiene and personality adjustment. Included in the 14 chapters are the following titles: adolescent escape and defense mechanisms; emotional maturing; disturbances in adolescent personality; and the hygiene of adolescence. Good use is made of the research data available in the general field. A glossary of technical terms is included.—*L. A. Averill* (Worcester State Teachers College).

6014. **Armstrong, C. P. 660 runaway boys. Why boys desert their homes.** Boston: Badger, 1932. Pp. 208.—Deserting the home, irrespective of motives, is legally a delinquency in boys between 7 and 16. The 660 runaway school boys in this study are "delinquent" boys only. Runaways held in court as "neglected children" or on an "improper guardianship" complaint were excluded. The extent to which running away from home contributes to other delinquencies is commonly covered up by statistics based on court records classified according to the most heinous offense or the immediate cause of arrest. Frequently when the charge is stealing, the offense was originally committed to enable the runaway to live. Of the 660 boys studied, 590 never left New York. Many remained hidden in halls, subways, or elevated trains until caught. "Wanderlust" and "desire to see the world," so often assumed to be a leading motive for runaways, played a part in only about 2.4% of the cases. Self-assertiveness and spirited independence played no part at all. Escape was the basic motive for nearly every runaway. In 12% of cases, the boys had been severely beaten. Another 32% feared punishment. The specific reasons why the others wanted to get away varied widely, but emotional conflict with authorities (of family or school) or some excessive burden of responsibility accounted for the majority.—*M. F. Martin* (West Springfield, Mass.).

6015. **Baudouin, C. The mind of the child; a psychoanalytical study.** (Tr. by E. & C. Paul.) New York: Dodd, Mead, 1933. Pp. 282. $3.00.—See VII: 2992.—*R. R. Willoughby* (Clark).

6016. **Bühler, C. El nen i la familia.** (The child and the family.) *Rev. de psicol. i ped.*, 1933, **1**, 136–149.—A Catalan translation of the author's summary of her chapter *The Social Behavior of the Child*, in *Handbook of Child Psychology*, Clark Univ. Press, 1931.—*M. E. Morse* (Catonsville, Md.).

6017. **Catel, W. Über das spätere Schicksal von Kindern mit intrakraniellen Geburtsblutungen.** (The later fate of children with intracranial birth hemorrhages.) *Monatssch. f. Kinderhk.*, 1933, **58**, 89–103.—*K. C. Pratt* (Michigan Central State Teachers College).

6018. **Cohen, M. Observations sur les dernières persistances du langage enfantine.** (Observations on the late persistence of infantile language.) *J. de psychol.*, 1933, **30**, 390–399.—The author presents observations on several children who retained infantile speech characteristics at ages ranging from 3 to 12 years.—*N. L. Munn* (Pittsburgh).

6019. **Dudycha, G. J., & Dudycha, M. M. Adolescents' memories of preschool experiences.** *J. Genet. Psychol.*, 1933, **42**, 468–480.—College students were asked to report the earliest experiences they could remember (several of which are here furnished). For the most part they were experiences with emotional coloring, especially fear and joy.—*J. F. Dashiell* (North Carolina).

6020. **Freeman, F. N. Individual differences in mental growth.** *Scient. Mo.*, 1933, **37**, 263–266.—A study of the growth of individual children does not confirm the conclusion from the earlier studies of mental tests that the slower children reach the end of their mental growth earlier than do the faster children. Duplicate or identical twins who have been reared apart differ from each other in ability about twice as much as do identical twins who are reared together. —*J. F. Dashiell* (North Carolina).

6021. **Gilmer, B. v. H. An analysis of the spontaneous responses of the newborn infant.** *J. Genet. Psychol.*, 1933, **42**, 392–405.—Motion pictures of the activities of four infants taken at various times during the first ten days of life were subjected to analysis; and in the case of nine responses (crying, stretching, sneezing, mouthing, yawning, opening mouth, chewing, sucking, smiling) it was found that each response had a characteristic combination of essential elements and each response had some element peculiar to it. Furthermore, the participation of limb movements was found regularly in certain of the responses only. The motion picture studies were corroborated by nursery observations. Emphasis is therefore laid upon patterning in infant behavior.—*J. F. Dashiell* (North Carolina).

6022. **Graucob, K. Hans Carossas Selbstdarstellung seiner Kindheit und Jugend in ihrer entwicklungs- und typenpsychologischen Bedeutung.** (Hans Carossa's description of his childhood and youth in their genetic and typological significance.) *Zsch. f. angew. Psychol.*, 1933, **44**, 217–244.—An analysis of two autobiographical writings by the German poet Hans Carossa from the point of view of Jaensch's theory of personality.—*K. F. Muenzinger* (Colorado).

6023. **Grégoire, A. L'apprentissage de la parole pendant les deux premières années de l'enfance.** (Acquisition of speech during the first two years of infancy.) *J. de psychol.*, 1933, **30**, 375–389.—Observations on the development of speech, with special reference to phonetics.—*N. L. Munn* (Pittsburgh).

6024. **Herzfeld, E., & Prager, F. Verständnis für Scherz und Komik beim Kinde.** (The child's understanding of jokes and the comic.) *Zsch. f. angew. Psychol.*, 1930, **34**, 353–417.—The methods used to study the evolution of the child's understanding of jokes and the comic were peek-a-boo play; teasing by withdrawal of a proffered cake; jumping-jack; red "jumping cat"; appreciation of comic pictures; drawing "something funny"; and analysis of jokes which

children play. The conclusions are: The child's understanding of the comic depends on his level of physical and mental control and his interpretation of the environment. His reactions pass through the stages of indifference or fear, interest, and eventually merriment. Amusement first appears as interest wanes. The beginnings of understanding of the comic appear at one year and are concerned with distorted human figures or movements. The first inanimate objects to appear comic are those showing great disproportion or unnatural color. These arouse the greatest mirth at 4 years, when the child has just grasped size relationships. When he has learned to see the external world objectively, its distortions in the guise of impossible combinations and anthropomorphization become funny (7–8 yrs.). Finally, inadequate human behavior and triumph over weak, stupid or awkward persons become the chief comic motifs. For the child, the comic is purely external and expresses victory over objects and situations with which he has recently experienced difficulty. Numerous tables and pictures are given, also an extensive bibliography.—*M. E. Morse* (Catonsville, Md.).

6025. **Hetzer, H. Die symbolische Darstellung in der frühen Kindheit.** (Symbolical representation in early childhood.) *Wiener Arb. z. päd. Psychol.*, 1926, Heft 3. Pp. 92.—In this study of the development of the representational function in children of different sexes and environments between the ages of three and six, four different types of symbolical representation are considered: representation by means of mimicry, building with blocks, drawing with crayon, and arbitrary symbols in a "postman" game. Age and sex differences in ability were found. In general the girls surpassed the boys. Three-year-olds were able to build with blocks, but could not draw with crayon anything with representational value. This could be done by four-year-olds. Comprehension of entirely arbitrary symbols is found in children only at the end of the sixth year.—*E. Fehrer* (Bryn Mawr).

6026. **Kroll, G. Zur Frage der Schundliteratur.** (The question of vulgar literature.) *Arch. f. Krim.*, 1933, **92**, 250–251.—From long experience as a teacher in a girls' lyceum, Kroll concludes that the permanent effect of sensational literature on adolescents has been overrated. Enjoyment of it is only one of the symptoms of the general reaching-out at puberty, and later the literary taste returns to normal. On the other hand, "slippery" literature probably always has a serious effect. Since the war, a change of reading interest has come over young people, and smutty publications apparently no longer circulate surreptitiously.—*M. E. Morse* (Catonsville, Md.).

6027. **Langworthy, O. R. The differentiation of behavior patterns in the foetus and infant.** *Brain*, 1932, **55**, 265–276.—A compilation of the results of experimentation on the opossum by the author, of Hartman's previous observations of the same mammal, and of the studies of *Ambystoma* by Coghill and of the human fetus by Minkowski.—*V. M. Jones* (Boston Psychopathic Hospital).

6028. **Lehrer, L. [Children's dreams.]** *Unser Shul*, 1933, 3, No. 4, 1–4.—*D. Shakow* (Worcester State Hospital).

6029. **Levy, D. M. Use of play technic as experimental procedure.** *Amer. J. Orthopsychiat.*, 1933, **3**, 266–277.—The report of the behavior of ten children (aged 5–13) all having younger siblings, in a play situation in which dolls representing mother, a baby, and a younger sister (or brother) are used to bring out the child's reactions of jealousy and sibling rivalry. —*H. Peak* (Yale).

6030. **Luria, A. [Language and intelligence in the city child, the country child, and the child without a home.]** Moscow: Gosizdat, 1930. Pp. 191. 2 rubles.—A collection of articles on the verbal reactions of children from different environments. These reactions can be studied only in relation to environment, because upon this depends the child's development; i.e., the homeless child does not respond to questions on family life, since this is unfamiliar to him. Difference in age plays a smaller part than difference in environment. Facts are also given on the differences in reaction when the child is obliged to respond to a foreign language and his reactions in his mother tongue.—*J. C. Spence* (Worcester, Mass.).

6031. **Meents, I. G. Einfluss der Waisenhaus-Erziehung auf den Charakter.** (The influence upon character of an orphanage upbringing.) *Waisenhilfe*, 1932–33.—Having been raised in an orphanage, the author was interested to discover the general opinion of others like himself about the effect which this has upon character. Questionnaire replies from 114 persons show appreciation for the attainment of industry, conscientiousness, sense of duty, ambition, helpfulness, modesty. Also mentioned are independence, punctuality, orderliness, steadfastness, physical sturdiness, simplicity of living conditions, companionship, self-reliance, knowledge of human nature.—*I. G. Meents* (Königsberg).

6032. **Müssler, M. Das Bauen des Kindes mit zweifarbigem Material.** (The child's building with two-colored material.) *Neue psychol. Stud.*, 1933, **8**, No. 1. Pp. 124. RM. 6.—The author experimented with 3–12-year-old children, using building blocks of two saturated complementary colors. Suggestion was avoided, and the construction represented pure play with form and color. In form, the chief motif was symmetry. At first the use of color was lawless and confused, but it soon assumed regularity, most often a regularly asymmetrical order. Müssler describes the variations of color arrangement in detail, and shows that they arise chiefly from the child's practice of placing the blocks simultaneously with both hands, and that the guiding feeling is alternation. Color arrangement in purposeful construction follows the same laws.—*R. Rüssel* (Leipzig).

6033. **Nolte, R. Analyse der freien Märchenproduktion.** (Analysis of the creation of fairy tales.) *Stud. z. psychol. Aesth. u. Kunstwiss.*, 1931, **4**. Pp. 144.—10- to 11-year-old girls were shown pictures, and while music was playing they were asked to tell fairy tales. The character of the stories agreed

surprisingly well with that of the music. The author concludes that fairy tales originate in feelings.—*K. F. Muensinger* (Colorado).

6034. Odic, R. **Comment l'Italie fasciste traite les enfants dévoyés.** (How Fascist Italy handles problem children.) *Rev. de psychol. appl. de l'est*, 1933, **3**, 73–76.—The organization and work of *L'Oeuvre Nationale de la Maternité et de l'Enfance* is described. —*P. Seckler* (Radcliffe).

6035. **Pigors, P. Leadership and domination among children.** *Sociologus*, 1933, **9**, 140–157.—In order to study leadership in children, this trait needs to be carefully defined and differentiated from domination, a trait many of whose manifestations are similar to those of leadership. But essentially, leadership is the guidance of others toward a common goal, whereas domination is the forcing of others, by assertion of superiority, to perform acts that further the dominator's private interests. Other differences between the traits, for example the fact that domination may appear at an earlier age than leadership, are discussed. The author questions whether children showing domination in youth will grow into adult leaders.—*E. Fehrer* (Bryn Mawr).

6036. **Renshaw, S., Miller, V. L., & Marquis, D. P. Children's sleep; a series of studies on the influence of motion pictures; normal age, sex and seasonal variations in motility; experimental insomnia; the effects of coffee; and the visual flicker limens of children.** New York: Macmillan, 1933. Pp. xviii + 242. $2.00.—The objects of this series of experiments are indicated in the sub-title. After a comprehensive introduction to the problem, the authors describe in considerable detail the nature of the children used as subjects in the experiments, and the apparatus and methods. A careful preliminary study of normal sleep motility precedes the experimental investigations. Each of the experimental chapters is summarized by the authors. There is a topical bibliography of 255 items. Some of the more characteristically significant findings may be briefly stated as follows: Seeing some films does induce a disturbance of recuperative sleep in children to a degree which can become detrimental to health; but some films have a sedative effect which is good; it is not possible to make sweeping generalizations concerning which may be the "best" type of film. Because of the extent to which attendance at movies induces insomnia in children, the best hygienic regulations should include only infrequent attendance at programs of selected types. The effect of attendance at motion pictures may be as great as, or greater than, the effect of ingesting from 4 to 6 grains of caffein between the hours of 6 and 9 p.m. Restlessness in sleep following exposure to motion pictures may not be attributed to the effects of the flicker of the picture.—*O. L. Harvey* (Boston).

6037. **Rosenzweig, S. Preferences in the repetition of successful and unsuccessful activities as a function of age and personality.** *J. Genet. Psychol.*, 1933, **42**, 423–441.—37 children, aged 5 to 14 years, were given two jig-saw puzzles as a competitive test, one puzzle resulting in success, the other in failure. In verbal expression of preference nearly all liked better the puzzle on which success was met. But when allowed to repeat either, nearly half chose the unsuccessful one. This choosing of the unsuccessful one was related positively to chronological and mental age and teachers' ratings on pride. It would appear that with increase in age comes increase in conscientiousness and socialization.—*J. F. Dashiell* (North Carolina).

6038. **Schächter, M. Die Pathogenese der Enuresis.** (The pathogenesis of enuresis.) *Jahrb. f. Kinderhk.*, 1933, **90**, 234–235.—The author suggests that enuresis be treated by corticalization, through a conditioned reflex technique, of the act of micturition.—*K. C. Pratt* (Michigan Central State Teachers College).

6039. **Schultze, W. Die Gestaltungseinheit im Spiel des Grundschülers. Eine morphologische Untersuchung auf Grund von Beobachtungen im Schullandheim.** (Configurational unity in the play of school children. A morphological study based upon observations in a summer camp.) *Arch. f. d. ges. Psychol.*, 1933, **87**, 1–68.—This study deals with play in boys 9–10 years old. It describes their activity with especial reference to the attraction for the boys and closure in themselves of play units. Work and play can be distinguished only as regards the realms in which they occur. Play is found in the realm of sheer joy of life. Playing is either spontaneous activity (sand pile, imitation, play-acting, tag, etc.) or it is to a greater or less extent determined by rules not originating with the players (games both with and without specific toys, competitions, etc.). In both cases, but especially the former, the world or ordinary objects frequently undergoes radical changes to suit the play. A chair is a horse, an automobile, the counter of a fish market or a fortress as occasion demands. In all their play none of the children seemed disposed to aid his fellows—even those on his "side" in a game of war. Most pronounced, however, were the influences exerted upon the players by the occurrence of changes internal to the games themselves. Thus pirates quickly became chauffeurs if the piratical cave pierced through an embankment to become a tunnel. Sometimes an additional player would change a small group into an army. Occasionally two independent play groups would find themselves brought together (e.g. each wishing to use the same spade) and a new game combining them all would emerge. The creative productivity of play is stressed.—*W. D. Ellis* (Mass. State College).

6040. **Schumacher, W. Psychologie des Oberstufenkindes.** (Psychology of the upper-grade child.) Dortmund: W. Crüwell, 1932. Pp. 179. 3.95 RM.—The author has undertaken the task of presenting the most important portion of existing knowledge concerning the advanced child, in order to give teachers and tutors help and suggestions. The upper-grade child belongs to a stage of development connected with the passage of childhood to maturity. Therefore (1) pre-school childhood, and (2) school childhood are discussed in this book in their characteristic features

and according to several well-defined principles of development, natural aptitude, and acquisition of knowledge. The upper-grade child is distinguished by a special quality of puberty, a combination of remaining childhood and developing maturity. Attention, interest, and intellectual ability, as well as will, feeling and enjoyment of life, religiousness, moral and social demeanor, eroticism, and sexuality are discussed on the basis of the most modern conclusions from investigations. The author is always careful to use real examples from his teaching and tutoring experience. They appear, for instance, as illustrations in the discussions concerning the development of capacity, comprehension, and judgment, and as conclusions, also, to the expositions about the development of arithmetic capacity, algebra ability, geometr ability, esthetic experience, figure drawing, literary understanding, and grammar. Boyish pranks, play, and vocational inclinations are discussed briefly. The book closes with an inquiry concerning the significance of the environment and school types for instruction and tutoring. A comprehensive bibliography of 132 references includes all the work significant for the psychology of the upper-grade child.—*W. Schumacher* (Dortmund).

6041. **Shacter, H. S. A method for measuring the sustained attention of preschool children.** *J. Genet. Psychol.*, 1933, **42**, 339–371.—Since little of an experimental nature has been done on the attention span of preschool children, an attempt has here been made to develop a method, involving the recording of time intervals during which a child will continue each of three simple and three complex activities (e.g., placing pictures, dropping pegs, etc.). Results on a small number of children indicate: (1) there are no significant differences in periods of sustained attention in 3-, 4-, and 5-year-olds; (2) girls show longer periods, especially at the younger ages; (3) preschool children in general show periods within a range of 8 to 12 minutes.—*J. F. Dashiell* (North Carolina).

6042. **Shirley, M. M. The first two years. III. Personality manifestations.** Minneapolis: Univ. of Minnesota Press, 1933. Pp. xi + 228. $2.50.—This is the concluding volume of the author's study, with Edith Boyd, of a group of 25 babies from birth to two years. The nucleus of the book is contained in three chapters describing respectively the personality manifestations during psychological tests, in incidental reactions, and in speech; there are also a chapter on irritability and one on the family backgrounds, and interpretative chapters at the beginning and end on the significance of personality in general and in infancy. The method is that of profiles and time charts supplemented by descriptions and to some extent by photographs. It is concluded that the major outlines of personality are innate, but that they are somewhat modified by early training; the individual differences are great, and the patterns are approximately constant for a given child.—*R. R. Willoughby* (Clark).

6043. **Taft, J. The dynamics of therapy in a controlled relationship.** New York: Macmillan, 1933. Pp. xi + 296. $2.50.—Almost verbatim records of two time-controlled relationships between therapist and (1) a seven-year-old girl, (2) a seven-year-old boy. Relationship therapy is defined as an opportunity to experience the direction, depth and ambivalence of the impulses which relate self to outer reality and to discover first-hand the possibility of their organization into an autonomous creative will.—*E. A. Collamore* (Worcester, Mass.)

6044. **Updegraff, R. The correspondence between handedness and eyedness in young children.** *J. Genet. Psychol.*, 1933, **42**, 490–492.—By use of the Miles A-B-C vision test and the author's handedness test, it was found that among 37 preschool children 72% of the right-handed children were right-eyed, 66% of the left-handed were left-eyed, 95% of the right-eyed were right-handed, and 21% of the left-eyed were left-handed.—*J. F. Dashiell* (North Carolina).

6045. **Updegraff, R., & Herbst, E. K. An experimental study of the social behavior stimulated in young children by certain play materials.** *J. Genet. Psychol.*, 1933, **42**, 372–391.—28 2- and 3-year-old children were observed as they played in pairs in a room where either clay or blocks was available; and their behavior was analyzed into 25 items. After a rating of these items it was found that behavior of a sociable and cooperative type occurred more frequently during play with clay than during play with blocks. It is considered possible that the blocks are more interesting or more familiar; at any rate, they may be used more creatively.—*J. F. Dashiell* (North Carolina).

6046. **Vormittag, S. Untersuchungen über die Atmung des Kindes. I. Atemzahl und Atemform des gesunden Kindes.** (Investigations upon the respiration of the child. I. Respiratory rate and form of the normal child.) *Monatssch. f. Kinderhk.*, 1933, **58**, 249–265.—The author presents a table showing the different respiratory rates assigned the neonate by 30 authorities. In his own studies the form and rate of respiration of 125 children ranging in age from 1 day to 15 years are investigated by means of the pneumograph and by means of the spirometer and Hürthle's mask. In all age classes the respiratory rate in sleep is less than in the waking state. Both rate and form are easily modified by stimulation. Values for respiratory rates at different ages are as follows:

Between	per min.	Mean per min.
1–7 days	72–22	35.0
8–28 days	71–21	37.7
1–6 months	58–21	33.3
½–2 years	45–19	27.8
2–5 years	40–21	26.5
5–10 years	31–15	20.4
10–15 years	31–14	19.1

—*K. C. Pratt* (Michigan Central State Teachers College).

6047. **Wagner, M. A. Day and night sleep in a group of young orphanage children.** *J. Genet. Psychol.*, 1933, **42**, 442–459.—42 orphanage boys, aged 2 to 5 years, were observed in their pre-sleep and sleep

periods both afternoon and night. Duration of day and night sleep showed a negative correlation; duration of day sleep and time for going to sleep at night, a positive; and time for going to sleep, day and night, a low positive. Total time of sleeping showed negative correlation with age, especially with mental age. Sleeping alone was accompanied by quicker falling asleep and longer sleep.—*J. F. Dashiell* (North Carolina).

6048. **Waller, H. Das seelisch-abnorme Kind im Lichte der Psychologie primitiver Völker.** (The mentally abnormal child in the light of the psychology of primitive peoples.) *Zsch. f. Kinderhk.*, 1933, **55**, 17–29.—Parallels are traced between the mental processes of primitive peoples and the behavior of the neurotic child. Similarities in thinking, in inability sharply to differentiate fantasy from reality, etc. are noted.—*K. C. Pratt* (Michigan Central State Teachers College).

6049. **Yarmolenko, A. The motor sphere of school-age children.** *J. Genet. Psychol.*, 1933, **42**, 298–318.—A set of tests of motor development (including speed, precision, strength, or endurance of walking, grasping, throwing, jumping, holding out arm, etc.) was applied to 30 girls and 30 boys aged 8–15. Tabulated and graphed results show an age period of positively accelerated development between 10 and 12 or 13, with negative acceleration earlier and later. On the basis of age-sex group results showing means and sigmas for the various tests, the motor profile of an individual can be drawn; this has a usefulness for individual diagnosis and for measurement of training results.—*J. F. Dashiell* (North Carolina).

6050. **Yefroikin, Z. [Envy and hate in the family.]** *Unser Shul*, 1933, **3**, No. 2, 3–8.—A semi-popular discussion of these traits in children.—*D. Shakow* (Worcester State Hospital).

6051. **Zietz, K. Ein Bild und ein Wirklichkeitsversuch an zwei Kindern.** (A picture and a situation test with two children.) *Zsch. f. angew. Psychol.*, 1933, **44**, 193–216.—This is a detailed study of the suggestibility of a boy and a girl by means of a picture and of an actual situation, which was the same as that used by Bonte (see VII: 5787). It confirms the latter's conclusion that suggestibility is a function of the structure of the whole personality.—*K. F. Muenzinger* (Colorado).

[See also abstracts 5618, 5645, 5649, 5696, 5700, 5775, 5787, 5814, 5827, 5838, 5915, 5933, 5944, 5947, 5967, 5972, 6086, 6110, 6119.]

EDUCATIONAL PSYCHOLOGY

6052. **Augenreich, E. Kontrollversuche nach zehn Jahren zu Julius Wagner: Die Schulstrafe im Urteil des Schulers.** (A control experiment after ten years, in connection with Julius Wagner's *School Punishment in the Judgment of the Pupil.*) *Zsch. f. päd. Psychol.*, 1931, **32**, 441–448.—This resurvey of Wagner's problem appears to show at the end of ten years a certain development in the opinions of the subjects. Punishments of a social nature are now considered as the heaviest; withdrawal of confidence and blame by comrades drop from first to third rank. In spite of the small number of subjects, the differences appear to be clear-cut.—*M. G. Willoughby* (Clark).

6053. **Bennett, A. The retarded child in the rural school.** *Ment. Hygiene*, 1933, **17**, 466–471.—*O. L. Harvey* (Boston, Mass.)

6054. **Bixler, R. W. Variable standards of marking in high schools.** *School & Soc.*, 1933, **38**, 159–160.—A comparison was made of the average performance on the American Council Psychological Examination of students from each of 24 public high schools in Chicago whose average high-school grade fell in each of the two-point intervals from 77 to 93. So great were the differences in the significance of the grades earned in the various high schools found to be that the officer in charge of admissions at the University of Chicago has been given the right, when making decisions regarding admissions, to interpret high-school marks on the basis of his knowledge of the character of the school from which the applicant comes.—*H. L. Koch* (Chicago).

6055. **Braga, E. Os elementos psychosociologicos nos programmas de ensino.** (The psychosociological elements in educational programs.) *Arch. brasil. de hygiene ment.*, 1931, **4**, 3–16.—Education should contribute to life in all the richness of its social relationships, and educational programs should envisage, not subjects and books, but all the educative factors of life. In addition to the general psychological principles of a modern education based upon centers of interest, the author considers the need for an adaptation to the environment, and proposes investigations of each community to determine its resources for training in such adaptation; educational uniformity cannot be admitted.—*M. G. Willoughby* (Clark).

6056. **Bruce, W. F. Comment upon Breed's criticism of Dewey.** *School & Soc.*, 1933, **37**, 812–814.—The author objects to Breed's contention that Dewey and the progressive educators overemphasize intelligence, creativeness, and the problematic situation, while neglecting habit, custom, and accumulated organized knowledge. Dewey does object to the concept of habit as fixed and does not attempt to separate habits clearly from intellectual activities. On the other hand, the author contends that Dewey does not ignore habits, rather labelling them as the "sole agents of observation, foresight, and judgment."—*H. L. Koch* (Chicago).

6057. **Brueckner, L. J. The validity and reliability of educational diagnosis.** *J. Educ. Res.*, 1933, **27**, 1–10.—It has frequently been found that if several examples of a single type of problem are given some will be correctly and some incorrectly answered. This problem of chance or accidental errors has a considerable bearing on the validity of diagnostic tests. From a study of the literature the author suggests several possible causes of these errors and promises a more complete account in a forthcoming Yearbook of the National Society for the Study of Education.—*S. W. Fernberger* (Pennsylvania).

6058. **Brueckner, L. J. Social problems as a basis for a vitalized arithmetic curriculum.** *J. Exper. Educ.*, 1933, 1, 320–322.—Since much of the content of arithmetic as now taught deals with the quantitative aspects of social institutions, the question arises as to why more consideration has not been given to the social problems that are pressing for a solution in the institutions which are the backbone of the arithmetic course. In order to determine what these problems are, the author made an analysis of the problems listed by Hockett in his book *The Determination of Major Social Problems of American Life* that might be introduced into the work in arithmetic. The contention is advanced that if a systematic discussion of the implications and possible solutions of these problems were to be made the basis of the work in the phases of arithmetic to which they are related, such as banking, buying, selling, taxation, and the like, it is obvious that that subject would in a short time be raised from the level of routine drill and practice in solving so-called "problems" and would become a social study of the first order. The problems as listed by Hockett that might be considered in the courses in arithmetic are presented in the present article in the form of a topical analysis.—*H. W. Karn* (Clark).

6059. **Busemann, A. Pädagogische Psychologie in Umrissen.** (Outlines of pedagogical psychology.) Leipzig: Quelle u. Meyer, 1932. Pp. 187.—Education consists in (1) assisting the child to develop its own abilities and personal traits up to the point where it is able, biologically, to shift for itself if need be; (2) assisting the young person to fit into a social world—again until it can do this without further help; (3) intellectual development. A discussion of each is given. Failure by the educator anywhere along this line tends to throw the child back to the next lower stage. In general, the author attempts to present education in its widest sense, as a striving toward the concrete realization of meanings.—*A. Busemann* (Greifswald).

6060. **Clem, O. M., & Dodge, S. B. The relation of high-school leadership and scholarship to post-school success.** *Peabody J. Educ.*, 1933, 10, 321–329.—A study of the relationship of high-school leadership to post-school success in which the author concludes that those graduates who were leaders in high school have made a better showing in post-school activities than have scholars or members of the random group.—(Courtesy *J. Educ. Res.*)

6061. **Da Silveira, N. M. Um ensaio de organizaçao de classes seletivas do 1° grau, com o empiego dos testes A.B.C.** (An experiment in organizing selected first-grade classes by the use of the ABC tests.) Sao Paulo: Technical Assistance Service, 1931. Pp. 53.—To determine the degree of maturity necessary for learning to read and write and thus to avoid useless because premature efforts to teach these skills, the director of education of Sao Paulo, Lourenco, Jr., has prepared a series of eight tests (including copying designs, reproducing movements, ability to discriminate and reproduce sounds, immediate and logical memory, comprehension of directions, and attention) with notation of the results on a 3-point scale for each test. The choice of tests was guided by a preliminary experiment; following this, the tests were applied to 15,605 children in Sao Paulo, and the frequency curve obtained showed a mean of 14.0 points and a semi-interquartile range of 1.8. On the basis of these findings, 476 homogeneous selected classes were organized; three months afterward, a questionnaire showed that the method was completely satisfactory to 87% of the educators.—*M. G. Willoughby* (Clark).

6062. **Endicott, F. S. Factors influencing high school students in the choice of a vocation.** *Voc. Guid. Mag.*, 1931, 10, 99–101.—The author presents the results of a study made at the Eveleth, Minn., high school. 74% of the boys and 90% of the girls had already made a choice; the girls were influenced by the suggestions of their parents, the boys by considerations of the persons who had succeeded in the profession chosen; their reading was more important than that of the girls. The influence of the school, although stronger in the girls, was slight; that of the teachers and the other students was very slight, probably because the teachers had little contact with the pupils.—*M. G. Willoughby* (Clark).

6063. **Frasier, G. W., & Armentrout, W. D. An introduction to education.** (3rd. ed.) Chicago: Scott, Foresman, 1933. Pp. 435. $1.80.—*R. R. Willoughby* (Clark).

6064. **Freeman, F. N., & others. Selected references on educational psychology.** *School Rev.*, 1933, 41, 379–386.—*R. R. Willoughby* (Clark).

6065. **Gerberich, J. R. A technique for measuring the ability to evaluate objective test items.** *J. Educ. Res.*, 1933, 27, 46–50.—Schools using the objective form of tests should equip the student with a knowledge of the principles underlying the construction of objective test items and also develop a critical attitude toward such items. The results are given of a 68-item examination rated good or poor by a class of 40 advanced students at the University of Arkansas. Several methods of scoring were used, and the optimum method was a weighting of one for each good and two for each poor item correctly answered.—*S. W. Fernberger* (Pennsylvania).

6066. **Gerberich, J. R., & Jones, C. The optional and required reading of college students.** *School & Soc.*, 1933, 38, 93–96.—The personal interview technique was utilized to ascertain the relative amounts of optional and required reading done by 190 junior students in three colleges of the University of Arkansas. Of the 25.63 hours weekly averaged in all types of reading and study, 26% was spent in optional reading and 74% in required reading and study. A correlation coefficient of $-.37 \pm .06$ was found between the amounts of optional and required reading done by the women. When men and women are compared, it is noted that significantly greater amounts of time were spent by the men in optional reading and by the women in required reading. An index of cumulative university scholarship and the amount of time devoted by the women to reading

and study correlated to the extent of .28 ± .06.—*H. L. Koch* (Chicago).

6067. **Goldberg, N. [John Dewey's theory of education.]** *Unser Shul*, 1933, 3, No. 4, 8–15.—*D. Shakow* (Worcester State Hospital).

6068. **Gray, W. S. Improving instruction in reading.** Chicago: Univ. Chicago Press, 1933. Pp. 226.—The author here describes an experimental study in improving the teaching of reading. The investigation had three aims: to study ways and means of reorganizing and improving the teaching of reading in harmony with the results of scientific study; to determine the difficulties met with in efforts to reorganize and improve reading; and to measure the effect of constructive effort on reading achievement of pupils. The experiment included schools varying in size and in racial, economic, social, and cultural conditions. It covered a period of about five years and resulted in proof that wide use can be made of scientific studies in improving results. The principles which underlie good procedure are enumerated and the specific means used in applying them to various conditions are described. Difficulties encountered are outlined and classified, and the conditions essential to success are analyzed. The conclusion reached is that any school system can organize and improve its instruction in harmony with the results of research if the effort is made whole-heartedly.—*E. V. Brill* (Malone, N. Y.)

6069. **Greene, H. A., & Kelley, V. H. Iowa silent reading tests. Elementary test.** Yonkers: World Book, 1933.—This battery of silent reading tests, designed for grades 4 through 9, covers: Paragraph meaning, word meaning, selection of central idea, sentence meaning, location of information, and rate of reading. The total testing time is 42 minutes. The reliability, as measured by the *r* between the A and B forms of the test, varies between .41 and .90 for the different sub-tests, with a median total reliability of .90. By the split-half method, this became .98. Grade, percentile, and age norms are given.—*D. E. Johannsen* (Skidmore).

6070. **Guiler, W. S. Improvement and permanency of learning resulting from remedial instruction.** *School Rev.*, 1933, 41, 450–458.—An experimental study in which the author finds that the progress in the remedial group was more marked than in the non-remedial group.—(Courtesy *J. Educ. Res.*)

6071. **Hall, C. W. The use of the residence address in the prediction of high school graduation.** *School & Soc.*, 1933, 38, 19–20.—The author divided the territory served by one of the Cleveland high schools into 9 districts on the basis of racial, cultural, economic, and geographic considerations. He then noted for each district the relative frequency of those students withdrawing from school and those graduating. The districts differed greatly in what he termed graduation expectancy; hence the author recommends the use of residence as one factor in the regression equation for predicting failure to complete high school.—*H. L. Koch* (Chicago).

6072. **Hartmann, G. W. The interview as a research and teaching device.** *J. Appl. Psychol.*, 1933, 17, 205–211.—A discussion to show the many possible values of the interview with a brief citation of prominent literature in the field.—*R. S. Schultz* (Psychological Corporation).

6073. **Held, O. C. An attempt to predict the success of university freshmen in their adjustment to scholastic work.** Ann Arbor: Edwards, 1933. Pp. vii + 50. $1.00.—The prognostic value of several tests and groups of tests was determined. The subjects were students at the University of Pittsburgh. The criterion of success was average number of quality points. The tables give correlations for each academic subject as well as for groups of subjects. An evaluation of pre-admission data not based on tests is also presented. Bibliography of 110 references.—*N. L. Munn* (Pittsburgh).

6074. **Hildreth, G. An interest inventory for high school personnel work.** *J. Educ. Res.*, 1933, 27, 11–19.—The inventory consists of two parts: a sheet on which the student is to arrange his interests and preferences in a number of categories, and a check list which contains an extensive list of headings under each category. Examples of both forms are included. The categories include activities, games and sports, school subjects, types of books and magazines, occupations, personal characteristics, etc. Under each category the subject is to list both likes and dislikes from the lists given in the booklet.—*S. W. Fernberger* (Pennsylvania).

6075. **Hopkins, L. T. Learning essentials in an activity curriculum.** *J. Exper. Educ.*, 1933, 1, 298–303.—A summary of an address delivered at Minneapolis February 25, 1933, before the members of the Society for Curriculum Study. The problem for consideration was, "What happens to the learning of the technical processes, steps, or essentials in a curriculum of activities or experiences?" The author defends the thesis that the essentials are learned, and in support of this contention cites evidence based upon the achievement of pupils of the elementary division of Lincoln School of Teachers College on the old Stanford Achievement Test for the years 1925–26 to 1929–30 and on the new Stanford Achievement Test for the years 1930 to 1932 inclusive. The following conclusion was drawn from an analysis of the evidence: "If the old and new Stanford Achievement Tests are considered valid measures of some of the essentials, an assumption nearer the practice in the subject than in the experience curriculum, it seems reasonable to conclude that children in Lincoln School learn these essentials as well as children of like age, grade, and intelligence in the general school population, even though in Lincoln School such essentials are considered of relatively less importance and are given relatively less attention than in the subject curriculum."—*H. W. Karn* (Clark).

6076. **Howell, E., Dunn, M. W., & Stoker, D. Measuring the skills in an integrated program.** *J. Exper. Educ.*, 1933, 1, 316–319.—The author describes an experimental school program carried out at the Roosevelt Elementary Demonstration School of Long Beach, California, on the development of skills in those

subjects which have been considered the fundamentals in the school program. Since not all the skills which are commonly agreed to be the heritage of the elementary pupil could be attained by organizing instruction into major units of work, separate periods were set aside for the drill phases of arithmetic, spelling and reading. The experiment was conducted under ordinary school conditions; the class groups were large, averaging 42 in enrollment. The inference drawn from the test data over a 2-year period is that the skills can be maintained in an integrated program when an hour is allotted to those skills not growing out of the units of work.—*H. W. Karn* (Clark).

6077. **Jones, V., & Neet, C. Educational tests.** *Psychol. Bull.*, 1933, **30**, 518–531.—A bibliography of 173 titles covers the years 1931 and 1932. Some general trends are reported. Tests are increasingly related to problems of learning; they are increasingly used for the larger purposes of administration; comprehensive examinations are attracting wider attention; and the general question of validity in measuring desired outcomes at each level is being stressed in addition to mere reliability.—*J. F. Dashiell* (North Carolina).

6078. **Jones, W. B. Traits of vocational counselors.** *Voc. Guid. Mag.*, 1931, **9**, 348–353.—A study of the character of the vocational counselor, based on the work of W. Carter and on the investigations of the author. In the several characters studied there appeared to be wide differences in the qualifications necessary for a good counselor. Erudition and ability were not always mentioned; sometimes it was breadth of vision, understanding, simplicity, and the power to inspire confidence.—*M. G. Willoughby* (Clark).

6079. **Jordan, A. M. Educational psychology.** New York: Holt, 1933. (2nd ed.) Pp. xvii + 522. $2.50.—Major alterations from the first edition include the addition of two chapters dealing with measurement of personality traits and maturity and growth. More emphasis is placed on the role of the environment; transfer of training receives special consideration; and the chapter on motivation has been expanded and enlarged.—*O. L. Harvey* (Boston).

6080. **Kaseff, L. Educaçao dos super-normaes.** (Education of the super-normal.) Rio de Janeiro: J. K. de Oliveira, 1931. Pp. 300.—The book is based on work done with brilliant students from the elementary classes in the state of Rio. It considers the physiology, psychology, pedagogy, and sociology of the super-normal, and refutes the objections against specialized education of well-endowed children.—*M. G. Willoughby* (Clark).

6081. **Keilhacker, M. Die Frage der Lehrerpersönlichkeit von Schüler ausgesehen.** (The personality of the teacher from the point of view of the pupil.) *Zsch. f. päd. Psychol.*, 1931, **32**, 43–47.—Two thousand pupils between the ages of 8 and 20 wrote a composition on the subject, "The kind of teacher I should like to have." The youngest pupils thought it would be desirable for the teacher not to give too many assignments and that he participate in their play, walks and sports. The pupils in the middle range considered the personal relations with the teacher, his justice, and his pedagogic ability. The oldest pupils insisted especially on the necessity to bridge the gap between the teacher and the pupil. Very few of the subjects considered the sex of the teacher. Age, however, was considered worthy of consideration; the teacher must be neither too young nor too old.—*M. G. Willoughby* (Clark).

6082. **Klemm, O. Pädagogische Psychologie.** (Pedagogical psychology.) Breslau: F. Hirt, 1933. Pp. 80.—Pedagogy is a process of inculcation congruent with the nature of man. Naturally the differences between individual pupils will presuppose differences of pedagogical procedure. The psychology of types is hence of great assistance in pedagogy. This in turn brings us to a consideration of aptitude differences. The doctrine of individual psychology on this point is investigated and rejected. The concluding sections deal with a theory of mental work.—*O. Klemm* (Leipzig).

6083. **Kulp, D. H., II. Weekly tests for graduate students.** *School & Soc.*, 1933, **38**, 157–159.—Once during each of 7 successive weeks 32 graduate students were given a brief objective examination over the assigned readings in a course in educational psychology. A mid-term examination covering essentially the same points as the weekly quizzes served as a basis for dividing the class into two groups, the highest 50% being excused from the weekly quizzes from the middle of the term on, the lowest 50% continuing under the procedure. All students took the final examination. Whereas a marked difference in grade existed between the "high" and "low" group on the mid-term examination, a small and probably insignificant one obtained with respect to grades on the final examination, the "low" group averaging a gain of 10 points in percentile score, the "high" group a loss of 8 points. It is concluded that weekly tests tend to increase the amount of learning, even in a situation dealing with mature graduate students.—*H. L. Koch* (Chicago).

6084. **Lammermann, H. Ueber das Verhältnis von Allgemein- und Sonderbegabung und seine Bedeutung für eine organisatorische Differenzierung der Schule.** (The relationship of general and special ability and its significance for organizational differentiation of the school.) *Zsch. f. päd. Psychol.*, 1931, **32**, 377–391.—There are in Germany two kinds of plans for the instruction of gifted children: (1) those designed to provide a general development of a deeper sort than that provided for unselected children, and (2) those consisting of a nucleus of fundamental subjects, supplemented with special courses in technical and artistic skills. It has been found that scholastic ability is highly correlated with tests of logical and verbal ability, but less highly with tests of practical intelligence. From these facts and others the author feels that the best organization of the curriculum for these children would be special classes for them, supplemented later by special classes for practical,

technical, and artistic subjects.—*M. G. Willoughby* (Clark).

6085. **Lehrer, L. [The "best" environment.]** *Unser Shul*, 1933, **3**, No. 1, 7–10.—A short exposition of the nature of the Malting House School of Susan Isaacs.—*D. Shakow* (Worcester State Hospital).

6086. **Lovell, H. T. Character and personality.** *Aust. J. Psychol.*, 1931, **9**, 37–48.—A study of the role of the educator in the character formation of the child. The author considers on the one hand the disciplinary system, imposing a strict control on the expression of instincts and associated emotions, and keeping them within the boundaries of social convention; and on the other, the free play of intelligence in the growing personality. He indicates the delicacy of the problem and the difficulty of giving complete allegiance either to the traditional methods or to that of complete liberty.—*M. G. Willoughby* (Clark).

6087. **Lübke, K. Die Schwankungen der Schülerleistungen.** (The variations of scholastic achievement.) *Hallische pād. Stud.*, 1931, **14**. Pp. 107.—A study of the marks of 100 grammar-school and 150 high-school pupils throughout the years of their attendance. Among the boys there were decided drops at the years 8, 11, and 13; among the girls at 7, 9, 11, and 13.—*K. F. Muenzinger* (Colorado).

6088. **Lyman, R. L. Summary of investigations relating to grammar, language and composition.** *Suppl. Educ. Monog.*, 1929, No. 35. Pp. 302.—*R. R. Willoughby* (Clark).

6089. **Lyman, R. L. The enrichment of the English curriculum.** *Suppl. Educ. Monog.*, 1932, No. 39. Pp. 252.—*R. R. Willoughby* (Clark).

6090. **McRae, C. R. Teaching students to study.** *Aust. J. Psychol.*, 1931, **9**, 294–298.—For one year 16 subjects were trained in the rational organization of their studies from the point of view of physiological and psychological conditions. At the end of the year 10 subjects showed definite progress, 6 were stationary or slightly inferior to the preceding year; the general average was increased by 6%.—*M. G. Willoughby* (Clark).

6091. **Mikulski, K. [Psychological tests in the secondary school.]** Warsaw: Lisowska, 1930. Pp. 118.—The book is a report of the results obtained by the author in his capacity as school physician and psychologist in two of the large high schools of Warsaw. To him are referred pupils presenting conduct or personality difficulties or difficulties with their studies; he has been introduced to the group by means of a collective psychological test given to the entire student body. He is governed by the ideas of Adler, and so is inclined to search for the particular feelings of inferiority which have sought expression in the disturbed conduct, to restore confidence to the child, and to exert a favorable influence upon both the family and the teachers. The results obtained have been very encouraging.—*M. G. Willoughby* (Clark).

6092. **Parella, J. R. La pedagogia d'Eduard Spranger.** (Eduard Spranger's pedagogy.) *Rev. de psicol. i ped.*, 1933, **1**, 150–163.—An exposition of Spranger's theory of education, based on his writings and on his lectures at the University of Berlin, as yet unpublished in systematic form. His pedagogy is derived chiefly from his psychology and ethics, and also from his philosophy. Bibliography.—*M. E. Morse* (Catonsville, Md.)

6093. **Patey, H. C., & Stevenson, G. S. The mental health emphasis in education.** *Amer. J. Orthopsychiat.*, 1933, **3**, 241–265.—The first section of a qualitative study of mental hygiene in its relation to education includes a foreword in which the mental-hygiene approach is discussed. A section on the "Identities of mental hygiene and education" deals with their common cultural and historical roots and the present responsibility of the school in "developing potentialities for meeting life situations satisfactorily."—*H. Peak* (Yale).

6094. **Pintner, R. The presidents of the United States.** *Scient. Mo.*, 1933, **36**, 523–526.—Analysis is made of the names of presidents given in a free association test by many students examined in a course of years.—*J. F. Dashiell* (North Carolina).

6095. **Remmers, H. H. Vocational selectivity of an institution of higher learning.** *School & Soc.*, 1933, **38**, 178–180.—To test the selective influence of the character of a college or university, a large sample of high-school seniors in the state of Indiana were given the Purdue Placement Test in English for Senior High Schools and Colleges, Form A, their average score being compared with that of 1501 students who entered Purdue University in 1931. The high-school seniors excelled on the sections of the test concerned with punctuation, grammatical classification, recognition of grammatical errors, sentence structure, and spelling, whereas in reading and vocabulary the Purdue freshmen scored the higher. The latter, it was also noted, did relatively better on the Iowa Placement Mathematics Training Test and Iowa Placement Chemistry Aptitude Test than on the National Council Psychological Examination, when judged in accordance with national norms. Although admitting that the findings can be interpreted in terms other than selection, the author is inclined to believe that an institution such as Purdue, which emphasizes technological training, tends to draw students who are slightly inferior to typical high-school students in their command of the more formal aspects of English, but superior in extent of vocabulary and paragraph reading, as well as in vocational interests, which show some of their effects in above-average ability in mathematics and chemistry.—*H. L. Koch* (Chicago).

6096. **Rulon, P. J. The sound motion picture in science teaching.** Cambridge: Harvard Univ. Press, 1933. Pp. xiii + 236. $2.50.—Instructional material in physiography and biology was presented to two groups of ninth-grade pupils totaling about 2400, a third group of about 380 being tested, like the first two, for knowledge of the material before and after the instructional period of 30 days and three months later, but being given no instruction. Both instructed groups used a special textbook prepared for

the purpose, but one was subjected in addition to a series of eight reels (six produced for the experiment) of motion pictures accompanied by explanatory sound monologue. All groups were carefully equated for socio-economic status, sex composition, age, intelligence, previous information, and efficiency and teaching load of teachers. Marked superiority (about 38%) in acquisition of the material was found for the experimental group, and the material was also remembered better; the superiority was greater for thought items than for memory items, indicating absence of any tendency to excel at the expense of valuable thought habits. Bibliography of 29 items, and appendices presenting the instructional and test material used.—*R. R. Willoughby* (Clark).

6097. **Sander, W. Uebergang von der Grundschule zur Mittelschule.** (The transition from the primary to the middle school.) *Zsch. f. päd. Psychol.*, 1931, **32**, 197–201.—A description of the method of educational selection in use in Norderney. The children are rated by their teachers and given a knowledge test and the Bobertag-Hylla intelligence test. The definitive classification is made on the basis of the average ranks for these three measures.—*M. G. Willoughby* (Clark).

6098. **Schleier, L. M., & Schreiber, E. W. The freshman testing program.** *Western Ill. State Teach. Coll. Quar.*, 1932, **12**, No. 3. Pp. 68.—This is a report of the results of the freshman testing at W. I. S. T. C. for 1931 and 1932 as compared with similar results from teachers' colleges in general where testing was carried out under the Cooperative Testing Program of the Teachers College Personnel Association (organized in 1931). The tests used include the American Council Psychological Examination, two English tests, and the Elementary Examination (history, nature study, civic information, geography, and arithmetic). On the American Council Psychological Examination the medians of the W. I. S. T. C. freshmen were 127.59 and 134.00 in 1931 and 1932, respectively, while the medians of the freshmen entering 38 and 37 teachers colleges in the two years, respectively, were 117.88 and 137.76. Since the medians of freshmen entering regular colleges and universities were 142.08 and 175.36 for the two years, respectively, it appears that "high school graduates of the highest intellectual ability do not tend to enter the teachers college." As to sex differences in ability, men at W. I. S. T. C. were somewhat inferior to women in general level (120.00 vs. 130.00 in 1931; 125.45 vs. 137.60 in 1932), although the range was approximately the same for both sexes. A section is given over to the treatment of prediction of success in college. The following correlations are reported: .69 ± .0230 between grade points earned in high school and average honor points earned during the first two terms at college, which falls to .63 ± .0325 when the first five terms at college are considered; .60 ± .0253 (1931) and .60 ± .0224 (1932) between score on the American Council Intelligence Examination and average grade points for the first two terms at college; .51 ± .0313 (1931) and .57 ± .0241 (1932) between the Elementary Examination scores and grade points. Other sections of the report treat of an analysis of the arithmetic examination, how the several high schools from which W. I. S. T. C. recruits its students rank on the freshman tests, and teaching the non-credit course in arithmetic.—*L. M. Harden* (Clark).

6099. **Schrag, A. Abriss der Psychologie für Erzieher.** (Outline of psychology for educators.) Berne: Francke A.-G., 1933. Pp. 200. Schw. fr. 4.80.—The author's purpose is to give an introduction to the essentials of psychology without confusing side-issues; to demonstrate its applications to education; and to provide a clear and comprehensive preparation for psychological testing. A basis of general psychology is necessary for the strong emphasis of the book on educational psychology, which, however, is given practical direction by the consideration of child psychology, especially the works of W. Stern and K. and C. Bühler. There are also short summaries of the fundamentals of psychoanalysis, individual psychology, and correctional education, with their practical applications. The bibliography is designed to serve as an introduction to further study.—*A. Schrag* (Berne).

6100. **Sims, V. M. Improving the measuring qualities of an essay examination.** *J. Educ. Res.*, 1933, **27**, 20–31.—The variability in the grading of the traditional essay type of examination may be due to the following causes: disagreement as to what is being measured (content, organization, English, neatness, etc.); disagreement as to the combination of the various elements to the total and the weighting of the questions; differences in standards of grading and the subjectivity of the materials being marked. It has been found that the use of scoring rules reduces this variability, and also that considering the marks as raw scores and converting them into grades (standard units) also reduces it. The author determines to combine these two procedures. The material is an hour essay examination given to 33 students in general psychology at the University of Alabama. The papers consisted of 6 objective and 4 discussion questions, and they were scored by 8 readers, all using the same rules. A statistical treatment of the results indicates that under these conditions the variation among readers was slight and that the objectivity of the examination was high. On the other hand, the two types of questions seemed to measure different things, and although the reliability in both cases was satisfactorily high, the correlation between them was only .53.—*S. W. Fernberger* (Pennsylvania).

6101. **Sisson, E. O. Statistical determination of the social science curriculum.** *J. Educ. Res.*, 1933, **27**, 41–45.—Criticism of the rankings of topics in social science which have appeared in several studies.—*S. W. Fernberger* (Pennsylvania).

6102. **Stalnaker, J. M. Essay and objective writing tests.** *English J.*, 1933, **22**, 217–222.—This article describes the essay and objective English composition examinations used under the new plan at the University of Chicago for determining eligibility for the college certificate (ordinarily indicative of two

years of college work). A study of 38 cases showing a wide discrepancy between the ratings on the subjective and objective sections indicates that the objective section is a more valid estimate, inasmuch as it correlates more closely with class performance.—*S. M. Stoke* (Mount Holyoke).

6103. **Stalnaker, J. M. Objective placement tests in English composition.** *English J.*, 1933, **22**, 395–403.—The author discusses objective placement tests in English composition. Their use has increased markedly. An analysis of nine of the best objective tests causes the author to believe that the tests emphasize relatively unimportant elements and tend to ignore the truly important aspects of writing. He offers suggestions for the correction of this defect.—*S. M. Stoke* (Mount Holyoke).

6104. **Stalnaker, J. M. Recognition of errors versus their correction.** *English J.*, 1933, **22**, 493–494.—Students were asked to classify 45 sentences according to the type of error which each contained. Then they corrected these sentences. The author states: "As far as this test is concerned, and as far as these students are concerned, a test of the ability to classify sentence faults gives virtually the same score as does the test of the ability to correct them." A similar experiment carried out by the English department yielded the same result as the one described above, which was carried out by the Board of Examinations of the University of Chicago.—*S. M. Stoke* (Mount Holyoke).

6105. **Stalnaker, J. M. A wordiness test for the higher levels.** *English J.*, 1932, **21**, 834–837.—The author describes a test of student ability to detect the unnecessary words in verbose sentences. Illustrative sentences are given. The values of the test are discussed.—*S. M. Stoke* (Mount Holyoke).

6106. **Steilberg, H. Die seelische und berufliche Krisis der jungen Hortnerinnen in der ersten Praxis.** (The psychic and professional crisis of young kindergarten teachers in their first positions.) *Zsch. f. pād. Psychol.*, 1931, **32**, 460–464.—Extracts from letters and diaries of alumnae of a kindergarten course. The practical situation often forces deceptions upon them which they succeed in overcoming only by a strong faith in a professional ideal.—*M. G. Willoughby* (Clark).

6107. **Tharp, B. B. Relation of education to the success of eminent women.** *Scient. Mo.*, 1933, **37**, 134–138.—From a study of entries in *Who's Who* it appears that college education for women has become, within the past thirty years, increasingly related to their success, especially in certain professions.—*J. F. Dashiell* (North Carolina).

6108. **Valentiner, T. Rapport annuel de l'Institut de Pédologie de Brême.** (Annual report of the Pedological Institute of Bremen.) *Trav. humain*, 1933, **1**, 215–217.—The opinions of primary school teachers and entrance tests are both important for admission to secondary school. Reporting back to the primary instructors the success of the pupils increased the accuracy of the instructor's predictions the following year. Teachers' judgments and subsequent trade success were compared. Examinations were given at the request of several industrial firms.—*H. E. Burtt* (Ohio State).

6109. **Watson, G. [The Karl Marx School in Berlin.]** *Unser Shul*, 1933, **3**, No. 4, 5–8.—*D. Shakow* (Worcester State Hospital).

6110. **Wicke, R. Die Musik in der Entwicklung des vorschulpflichtigen Kindes.** (Music in the development of the child of pre-school age.) *Zsch. f. pād. Psychol.*, 1931, **32**, 397–417.—The conclusion which is drawn from a study of data collected by different authors is that, because of the child's facility in musical play and his slight tendency toward creativity, the pre-school age is an excellent time for musical education.—*M. G. Willoughby* (Clark).

6111. **Wojciechowski, J. [The margin of apprenticeship and education in professional aptitudes.]** *Psikhotekh.*, 1931, **5**, 99–116; 153–169.—A study of the theoretical aspects of the psychotechnics of apprenticeship. The author limits himself to the analysis of the outstanding investigations on the question, and to pointing out the conclusions which can be drawn. There is a description, with illustrations, of 18 pieces of apparatus designed for use in the education of aptitudes and in measuring their margin of apprenticeship.—*M. G. Willoughby* (Clark).

6112. **Worcester, D. A. Has standardized testing been over-emphasized?** *School Executives Mag.*, 1932, **51**, 467–469; 490.—*R. R. Willoughby* (Clark).

6113. **Wray, R. P. The relative importance of items of chemical information for general education.** *J. Exper. Educ.*, 1933, **1**, 341–389.—The problem of this study was to determine the relative importance of the items of chemical information that are included in a course in general chemistry. By means of the questionnaire method information was obtained which made it possible to assign a distinctive "index value" to each item of chemical information as an indication of its relative usefulness in the lives of individuals. The following implications were drawn from the results of the study: (1) "This investigation has shown that the items of chemical information have approximately the same relative importance for all individuals. The beginning chemistry course can then be adapted in a practical way to the needs of all pupils by building the chemistry curriculum around the evaluated items." (2) "The information that ranks highest may be taught to all. Advanced assignments on any unit of work may have quantitative and qualitative differentiation in accord with the ability and future interests of the students." The total list of 1550 evaluated items of chemical information used in the study, classified according to the periodic classification of the elements, is appended to the article.—*H. W. Karn* (Clark).

[See also abstracts 5814, 5876, 5937, 5943, 5945, 5958, 6005, 6010, 6121.]

BIOMETRY AND STATISTICS

6114. **Craig, A. T. On the correlation between certain averages from small samples.** *Ann. Math. Stat.*,

1933, 4, 127–142.—The regressions of the median on the arithmetic mean, of the range on the median, and of the range on the arithmetic mean are determined. When the regression is linear the correlation can be computed. Three conditions are considered: when the range is from $-\infty$ to ∞, 0 to ∞, and 0 to a, a being positive. The values of the variable x are chosen at random from the interval (a, b) where this interval lies in one of the above ranges.—*J. W. Dunlap* (Fordham).

6115. **Fischer, C. H. On correlation surfaces of sums with a certain number of random elements in common.** *Ann. Math. Stat.*, 1933, 4, 103–126.—The writer extends and generalizes previous work on the correlation between sums having common elements. Bachelier's classification of probabilities and Craig's adaptation of this to three types of probability function, namely when the ranges $(-\infty, \infty)$, $(0, \infty)$ and $(0, a)$ respectively, are used. Under these three conditions of sampling, the correlation between two sums, the correlation surface, the marginal distribution of each variable, and the regression equations are given. This material is then generalized for P sums under the first condition of sampling. Finally, the correlation between three sums is presented where the second conditions $(0, \infty)$ holds.—*J. W. Dunlap* (Fordham).

6116. **Holzinger, K. J., & Swineford, F. Selected references on statistics and theory of test construction.** *School Rev.*, 1933, 41, 462–466.—An annotated bibliography on statistics and the theory of test construction of thirty selected titles.—(Courtesy *J. Educ. Res.*)

6117. **Peters, C. C. Note on a misconception of statistical significance.** *Amer. J. Sociol.*, 1933, 39, 231–236.—Ross's criticism of the Faris investigation of insanity rates, in insisting upon a critical ratio of exactly three or more, makes appeal to an element of magic which is not warranted by the actual nature of reliability measures. Ross, further, does not take cognizance of the increased reliability due to the fact that the differences are prevailingly in the same direction. In computing standard errors it is important to take account of the element of correlation. —(Courtesy *Amer. J. Sociol.*)

6118. **Woofter, T. J. Common errors in sampling.** *Soc. Forces*, 1933, 11, 521–525.—(Courtesy *Bibliographia Eugenica*).

[See also abstracts 5976, 6128.]

MENTAL TESTS

6119. **Hetzer, H., & Koller, L. Vier Testreihen für das zweite Lebensjahr.** (Four series of tests for the second year.) *Zsch. f. Psychol.*, 1930, 117, 257–306.—These are a continuation of Bühler's "baby tests." They differ from Kuhlmann's and Gesell's tests in that they are worked up statistically, and they form a connected systematic series designed to give exact knowledge of the child's action systems. Hetzer and Koller discuss their preliminary experiments, the choice and verification of tests, the actual procedure, and methods of reckoning. For each quarter-year there is a series of 10 tests, covering bodily control, handling of concrete material, social behavior, and imitation. 25 healthy children, equally distributed in the age-group, were tested in each series. A test was adopted if 75% of the age-group could pass it. For each test done beyond those corresponding to the child's chronological age, 9 days were added; similarly, for each one unsolved, 9 days were subtracted; and development age/chronological age = development quotient. For the first two years, each child's development quotient apparently remains constant, except as it may be affected by environment. Apparently also, in the first year 9 days + or −, and in the second year 20 days + or −, fall with normal limits. The bibliography includes studies in which the authors and their collaborators carry further the qualitative evaluation of the tests, normal variations, practical deductions, and prognostic value.—*M. E. Morse* (Catonsville, Md.)

6120. **Jankowska, A. [The value of the group test of Terman compared with the individual tests of Binet-Simon-Terman.]** *Polskie Arch. Psychol.*, 1931, 4, 274–295.—Using his own slightly adapted translation of the Terman Group Test of Mental Ability (reproduced in the article), the author gave the tests to 194 students; he compared the results of 74 of the tests with those obtained from individual Binet-Simon-Terman tests. The agreement between the two tests was 70%. In 5.5% of the cases the group examination showed an under-estimation, in 24.5% an over-estimation, in relation to the individual tests. The author concludes that the more practical group tests can well replace the individual tests, to which one has recourse only in the case of a divergence between the results of the group tests and the opinion of the teachers.—*M. G. Willoughby* (Clark).

6121. **Kinney, L. B., & Eurich, A. C. Studies of the true-false examination.** *Psychol. Bull.*, 1933, 30, 505–517.—A review of 77 titles leads to the conclusions: the value of this test is established; the fixing of false information is more than offset by the fixing of true; word forms and other clues need attention; there is no clear subjective line between certainty and guessing; scoring by R—W increases validity but decreases reliability; opportunity to change their responses benefits the superior more than the inferior pupils; the relative value of oral and printed examinations has not been determined.—*J. F. Dashiell* (North Carolina).

6122. **Lopes, E. Subsidio para a adaptaçao brasileira dos tests de Binet-Terman.** (Study on the Brazilian adaptation of the Binet-Terman tests.) *Arch. brasil. de hygiene ment.*, 1931, 4, 17–52; 97–132; 180–207.—*M. G. Willoughby* (Clark).

6123. **Pintner, R. Intelligence tests.** *Psychol. Bull.*, 1933, 30, 488–504.—In the years 1931 and 1932 over 330 contributions have appeared, of which 237 are selected for listing. These are very briefly mentioned and grouped with reference to a great number of topics; the author refrains from critical analysis.—*J. F. Dashiell* (North Carolina).

6124. **Porteus, S. D. The maze test and mental differences.** Vineland, N. J.: Smith Printing & Publishing House, 1933. Pp. 212. $2.50.—A presentation of a revision of the Porteus Mazes together with a summary of studies in which the test has been employed. Its use with mental defectives and delinquents, and for general purposes in mental examinations is discussed. Special attention is given to its applicability in the study of race differences, and various studies along this line are reported. New instructions and copies of the revised forms are presented at the end of the volume. A table of test quotients is also included. The bibliography is distributed through the volume.—*D. Shakow* (Worcester State Hospital).

6125. **Reymert, M. L. Mental tests.** *Amer. Yrbk.*, 1932, 812–816.—A review of the work in mental testing which took place in colleges, schools and clinics during the year 1932. Leading books and articles in the field are classified and abstracted under the headings of new tests, contributions to method and technique, and study of problems involving mental tests.—*H. W. Karn* (Clark).

6126. **Spearman, C. Aufruf zur Zusammenarbeit in der Persönlichkeitsforschung.** (A call for cooperation in the study of personality.) *Zsch. f. angew. Psychol.*, 1933, **44**, 316–320.—An invitation to take part in Spearman's plan for a cooperative venture in the study of personality.—*K. F. Muenzinger* (Colorado).

6127. **Vernon, P. E. The Rorschach ink-blot test. I.** *Brit. J. Med. Psychol.*, 1933, **13**, 89–118.—Vernon gives a comprehensive survey of the literature and a detailed description of the method of giving the test and interpreting and scoring of the replies. On the basis of the application of the test to 90 English and American college graduates and undergraduates, he examines its diagnostic value for presumably normal adults and makes recommendations toward improvement by the adoption of simpler and more objective methods of scoring. He also suggests that the psychogram embody a rating scale for traits shown by the subject during testing, e.g. interest, affective tone, inhibitions, etc. Complete bibliography.—*M. E. Morse* (Catonsville, Md.)

6128. **Wilson, E. B. On the invariance of general intelligence.** *Proc. Nat. Acad. Sci.*, 1933, **19**, 768–772.—In line with previous discussions the author here goes into further theoretical and statistical considerations concerning Spearman's two-factor theory of intelligence.—*W. N. Hallett* (Cedar Crest).

6129. **Wreschner, L. Testreihe zur Untersuchung der Intelligenz sechs- bis siebenjähriger Kinder.** (A series of tests used in studying the intelligence of children 6–7 years old.) *Arch. f. d. ges. Psychol.*, 1933, **87**, 183–230.—50 school children, 6–7 years old, were given a series of intelligence tests. These were designed chiefly to bring out ability in making judgments. For example, a book with torn or soiled pages is shown. "What is wrong, how could this have happened?" A group of heterogeneous objects is presented; all these with wooden handles are laid aside. "What is common to all of them? Find another group with some one common feature." Jigsaw puzzles were also used. The author reports a strong tendency to perseveration among the subjects. Attention is easily distracted and the field of vision is small. Abstract thinking is very rare, as is also any systematic arrangement of thought other than that dictated by the given objects. Memory for immediately past events is weak; empathy is almost wholly lacking.—*W. D. Ellis* (Mass. State College).

[See also abstracts 5656, 5759, 5828, 5888, 5928, 5933, 5944, 6061, 6116.]

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AUTHOR INDEX

(Continued from Inside Front Cover)

Miner, J. B., 5593
Mirk, M., 6001
Mitchell, W., 5594
Molinari, A., 5766
Molnar, E., 5956
Monnier, M., 5741
Montassut, M., 5883
Moore, J. S., 5595
Moos, J. C., 5957
Moracci, E., 5682
Moss, F. K., 5622
Mourgue, R., 5884
Muller, H. J., 5767
Mullin, F. J., 5809
Munn, N. L., 5733, 5742
Murray, M. M., 5717
Müssler, M., 6032

Nachmansohn, M., 5819
Nacht, S., 5885
Neet, C., 6077
Nelson, V. L., 5775
Newman, H. H., 5768
Nielsen, B., 5648
Nissen, A. J., 5769
Nissen, H. W., 5731
Noble, T. D., 5886
Nolte, R., 6033
Nyssen, R., 5626, 5770, 5866

O'Brien-Moore, A., 5887
Odic, R., 6034
Öhler, W., 5820
O'Leary, J., 5674
Olmsted, J. M. D., 5683
Ortmann, O., 5627, 5958, 5959, 5960, 5961, 5962
Ottolenghi, S., 5963

Page, M. L., 5888
Paine, V. L., 5743
Pallister, H., 5821
Parella, J. R., 6092
Parin, W. W., 5684
Parker, G. H., 5743
Parvialnen, S., 5720
Paterson, A. S., 5889
Paterson, D. G., 5986, 5989
Patey, H. C., 6093
Paull, R., 5628, 5629
Perkins, H. F., 5755
Perrando, G. G., 5964

Peters, C. C., 6117
Peters, H. N., 5716
Peters, W., 5630
Peterson, I. E., 5986
Petit, G., 5890
Petran, L., 5965
Pfeifer, R. A., 5891
Phalen, H. R., 5751
Piddington, R., 5822
Pigors, P., 6035
Pintner, R., 6094, 6123
Plattner, F., 5685
Poffenberger, A. T., 5596, 5966
Pollock, H. M., 5892
Pop, Z., 5893
Porteus, S. D., 6124
Poulson, W. M., 5648
Prager, F., 6024
Pressey, L. C., 5967
Pressey, S. L., 5967
Pritchard, E. A. B., 5718

Radó, S., 5823
Radovici, A., 5667
Rand, G., 5581
Ranschburg, P., 5719
Rasmussen, J. A., 5771
Razran, G. H. S., 5744
Reiche, A., 5894
Reitynburg, D., 6002
Remmers, H. H., 6095
Renquist, Y., 5720
Renshaw, S., 6036
Reymert, M. L., 6125
Rice, S. A., 5980
Richter, C. P., 5745
Riegele, L., 5686
Riley, H. A., 5895
Roback, A. A., 5969
Roberds, W. M., 5597
Roberts, H. H., 5970
Robinson, M. H. B., 5721
Rodrigo, M., 6003
Roemer, H., 5896
Rogge, C., 5968
Rose, M., 5746
Rosen, H. R., 5597
Rosenblueth, A., 5722
Rosenzweig, S., 6037
Ruch, F. L., 5723
Ruch, T. C., 5679
Rudeanu, A., 5631

Ruger, H. A., 5724
Rulon, P. J., 6096
Rupp, H., 6004, 6005
Rushton, W. A. H., 5824
Russell, E. S., 5747

Sachsenberg, E., 6006
Saller, K., 5772
Sander, W., 6097
Sanders, J., 5773
Sarkar, S. L., 5971
Saul, L. J., 5687
Schächter, M., 6038
Schaefer, H., 5632
Schaub, E. L., 5598
Schleier, L. M., 6098
Schottky, J., 5897
Schrag, A., 6099
Schreiber, E. W., 6098
Schubert, G., 5748
Schultze, W., 6039
Schumacher, W., 6040
Schwarz, G., 5725
Seagoe, M. V., 5972
Seashore, R. H., 5599
Seelig, E., 5973
Segre, R., 5726
Seitzer, A., 5774
Serog, M., 5825
Shacter, H. S., 6041
Shaxley, J. H., 5582
Sherman, M., 5898
Sherrington, C. S., 5665
Shirley, M. M., 6042
Simmat, R., 6007
Simmel, E., 5826
Sims, V. M., 6100
Singer, H. D., 5899
Sisson, E. O., 6101
Smoke, K. L., 5654
Sontag, L. W., 5775
Sorokin, P. A., 5974
Sosset, M., 5655, 5900
Spearman, C., 6126
Speidel, C. C., 5688
Spielrein, J., 6008
Spurrel, W. R., 5681
Stalnaker, J. M., 6102, 6103, 6104, 6105
Stanton, H. M., 5975
Steen, R. R., 5901
Stellberg, H., 6106
Sternberg, K., 5600

Stevenson, G. S., 6093
Stocks, P., 5776
Stoker, D., 6076
Stolte, K., 5727
Stone, C. P., 5732
Stone, H. M., 5902
Stone, S., 5903
Stouffer, S. A., 5976
Stransky, E., 5977
Strasser, C., 5078
Strauss, A., 5904
Strecker, H., 5905
Swineford, F., 6116
Szelöczey, J., 5702
Szirmay Pulsky, H., 5601

Taft, J., 6043
Takano, K., 5633
Talbert, E. L., 5979
Talbot, J. H., 5697
Targonski, H., 5656
Telford, C. W., 5728
Temkine, W., 5634
Ten Cate, J., 5749
Tharp, B. B., 6107
Thienpont, R., 5770, 5866
Thompson, J. H., 5721
Thompson, N., 5728
Tiegs, O. W., 5750
Tinel, J., 5906
Titeca, J., 5839
Tolman, E. C., 5602
Torrey, T. W., 5635
Trabue, M. R., 5989
Tramer, M., 5907
Travis, J. H., 5908
Triche, A., 5618
Trillot, —, 5835
Troina, F., 6009
Truche, —, 5878, 5879
Tsuiji, R., 5685
Tyrrell, D., 6010

Underhill, C. R., 5751
Updegraff, R., 6044, 6045
Urbányi, J., 6011
Usher, C. H., 5777

Valentiner, T., 5603, 6012, 6108
Van Bogaert, L., 5689
Van der Horst, L., 5636
Van Essen, J., 5636

Van Ormer, E. B., 5657
Vernon, P. E., 6127
Voigt, E., 5729
Vormittag, S., 6046

Wagner, M. A., 6047
Walder, R., 5827
Waller, H., 6048
Walter, W. G., 5730
Washburn, M. F., 5637
Waterston, D., 5638
Watson, D. L., 5604
Watson, G., 5828, 6109
Weiss, E., 5829
Wenzl, A., 5605
Wertham, F., 5830
Wertheimer, M., 5606, 5652
Wessinger, J. D., 5981
West, C. J., 5607
Wever, E. G., 5752
White, S. E., 5831
Whitney, L. F., 5755
Wicke, R., 6110
Wile, I. S., 5909
Willbrand, H., 5639
Wilson, E. B., 5980, 6128
Wittels, F., 5832
Wittmaack, K., 5640
Witzel, A. E., 5910
Wojciechowski, J., 6111
Wolf, W., 5641
Wolfe, W. B., 5911
Wolff, W., 5833
Woltereck, R., 5778
Wood, A. E., 5982
Woodard, J. W., 5980
Woofter, T. J., 6118
Worcester, D. A., 6112
Wray, R. P., 6113
Wreschner, L., 6129
Wulf, O., 5753

Yamamura, M., 5834
Yarmolenko, A., 6049
Yefroikin, Z., 6050
Young, J. Z., 5668
Yudin, H. C., 5754

Zeise, L., 5642
Ziehen, T., 5643
Zietz, K., 6051
Zimmerlein, K., 5983

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CONTENTS

Author Index 751–765

Subject Index 766

Additional Bibliographic Sources 799

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WALTER S. HUNTER, CLARK UNIVERSITY
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CONTENTS

The numbers refer to abstracts

General
1–29
383–422
777–798
1186–1214
1646–1680
2166–2195
2675–2702
3107–3134
3600–3622
4212–4260
4914–4953
5571–5607

Sensation and Perception
30–50
423–461
799–828
1215–1248
1681–1717
2196–2238
2703–2738
3135–3171
3623–3688
4261–4299
4954–5029
5608–5643

Feeling and Emotion
51–58
462–468
829–831
1249–1252
1718–1722
2239–2241
2739–2741
3172–3179
3689–3690
4300–4304
5030–5035
5644–5648

Attention, Memory and Thought
59–80
469–486
832–843
1253–1266
1723–1728
2242–2252
2742–2746
3180–3189
3691–3703
4305–4327
5036–5052
5649–5657

Nervous System
81–89
487–498
844–854
1267–1292
1729–1753
2253–2260
2747–2757
3190–3223
3704–3728
4328–4355
5053–5090
5658–5689

Motor Phenomena and Action
90–108
499–525
855–888
1293–1324
1754–1802
2261–2287
2758–2792
3224–3268
3729–3767
4356–4427
5091–5140
5690–5730

Plant and Animal Behavior
109–120
526–560
889–900
1325–1340
1803–1848
2288–2316
2793–2827
3269–3305
3768–3799
4428–4470
5141–5180
5731–5754

Evolution and Heredity
121–134
561–569
901–910
1341–1353
1849–1864
2317–2323
2828–2835
3306–3317
3800–3806
4471–4478
5181–5192
5755–5778

Special Mental Conditions
135–173
570–611
911–940
1354–1389
1865–1912
2324–2381
2836–2868
3318–3354
3807–3876
4479–4521
5193–5250
5779–5834

Nervous and Mental Disorders
174–220
612–678
941–1005
1390–1441
1913–1963
2382–2456
2869–2924
3355–3433
3877–3964
4322–4643
5251–5345
5835–5911

Social Functions of the Individual
221–278
679–719
1006–1077
1442–1509
1964–2036
2457–2540
2925–2981
3434–3484
3965–4024
4644–4713
5346–5436
5912–5983

Industrial and Personnel Problems
279–301
720–724
1078–1088
1510–1531
2037–2064
2541–2556
2982–2989
3485–3512
4025–4042
4714–4745
5437–5463
5984–6012

Childhood and Adolescence
302–346
725–747
1089–1116
1532–1567
2065–2098
2557–2595
2990–3039
3513–3556
4043–4094
4746–4797
5464–5498
6013–6051

Educational Psychology
347–364
748–767
1117–1157
1568–1607
2099–2153
2596–2658
3040–3079
3557–3585
4095–4157
4798–4872
5499–5537
6052–6113

Biometry and Statistics
365–372
768–770
1158–1169
1608–1629
2154–2155
2659–2662
3080–3091
3586
4158–4172
4873–4885
5538–5559
6114–6118

Mental Tests
373–382
771–776
1170–1185
1630–1645
2156–2165
2663–2674
3092–3106
3587–3599
4173–4211
4886–4913
5560–5570
6119–6129

PSYCHOLOGICAL ABSTRACTS

VOL. VII, No. 13 DECEMBER, 1933

AUTHOR INDEX

Aall, A., 5912
Aamodt, G. P., 4145
Abbott, G., 4043
Abdun-Nur, E. A., 5649
Abe, S., 2703, 5608
Abély, P., 2923, 3877, 5835
Abély, X., 2869, 2923, 3877, 5835
Abrams, J., 4328
Abshagen, R., 1293
Aburel, E., 1681, 5690
Ach, N., 5779
Achelis, J. D., 3190, 4261
Acheson, E. M., 3557
Achille-Delmas, F., 4522
Achilles, P. S., 1186
Ackerly, S., 4746
Ackerman, W., 4275
Ackerson, L., 2353, 4158
Adams, A. L., 394
Adams, H. F., 4173, 5538
Adams, R. D., 5599
Adams, S., 724, 1532
Adams, W. S., 2382
Adelstein, L. J., 2870
Adie, W. J., 30
Adler, A., 941, 2324, 2457, 3040, 3620, 4914
Adler, E., 942
Adler, M. J., 3469, 5980
Adolph, W. H., 3729
Adrian, E. D., 1267, 1682, 1729, 4329
Aichhorn, A., 1089
Akesson, S., 3623
Akishige, Y., 2196
Alba, P., 4853
Alberti, —, 1390
Alberti, H. v., 1865
Albiston, N. A., 330
Aldrich, C. G., 622, 1913
Aldrich, V. C., 2675, 4644
Aleck, A. W., 5251
Alexander, F., 1006, 1442, 1866, 2325, 2836, 4479, 5780
Alexander, M., 4523
Alexander, T., 4798
Alexander, W. P., 3092
Alfano, G. B., 5193
Alford, L. B., 5053
Allcock, H. J., 2659
Allee, W. C., 1803, 4439, 5913
Allen, C., 4524, 5836
Allen, C. N., 5252
Allen, E., 2326
Allen, F., 3191
Allen, F. H., 174
Allen, J. F., 423, 441, 442
Allen, J. K., 1391
Allen, R. D., 5499
Allison, J. B., 3276
Allison, L. W., 855
Allport, G. W., 3730, 5194
Almásy, G., 1754
Alschuler, R. H., 4044
Altavilla, E., 1964
Altenburger, H., 799, 3192, 3807, 5054, 5658
Alteri, —, 1392
Altman, —, 5299
Altman, M., 3909
Alvarez, J. C., 5837
Alvarez, W. C., 1272, 1296
Alverdes, F., 1325
Amano, T., 2197, 2209, 2704, 3135, 4212
Amberson, W. R., 5055
Ameln, K., 4760
Ames, A., 1215
Ames, A., Jr., 424, 800, 801
Amrain, A., 1914
Anastasi, A., 469
Andersen, K., 2327
Anderson, A. C., 1832, 4428
Anderson, B. O., 886
Anderson, C., 3800
Anderson, D., 5464
Anderson, E. W., 3878
Anderson, F., 4645
Anderson, H. C., 3624
Anderson, J., 2070
Anderson, M. L., 3041
Anderson, R. N., 3485
Anderson, S. E., 5571, 5572
Anderson, V. V., 943, 2596, 4799
Anderson, W. A., 723
Andrack, H., 2383
André, Y., 2399
Angell, F., 425
Angles, —, 1936
Angyal, A., 135, 1216, 4954, 4955, 5195
Angyal, L., 5324
Anokhin, P., 856, 857, 858, 859
[Anon.], 90, 279, 302, 748, 844, 901, 1007, 1078, 1187, 1188, 1189, 1190, 1393, 1443, 1510, 1511, 1512, 1513, 1533, 1683, 1684, 1804, 1849, 1850, 1850, 1867, 1915, 2597, 2676, 3042, 3136, 3434, 3808, 3879, 3880, 4025, 4026, 4095, 4096, 4525, 4646, 4747, 4748, 4800, 4915, 4916, 5181, 5346, 5437, 5465, 5838, 5914
Anossow, J. Z., 221
Ansart, M. B., 5691
Antin, R., 132
Anton, G., 1217
Antoni, N., 3731
Antonini, G., 1965
Aoki, S., 2458, 2758, 2759
Arafa, M. A., 572
Arbaugh, G. B., 1008
Arbman, E., 1009
Arcamone, G., 2598
Arctander, S., 1534
Argelander, A., 1354, 2156, 5466
Arian, D., 4749
Arkhangelskii, V. M., 3732, 3733
Arkin, E., 2837
Arkine, A., 4213
Arlitt, A. H., 303, 6013
Arlt, E., 5253
Armacost, G. H., 4101
Armentrout, W. D., 1154, 6063
Armstrong, C. P., 373, 4045, 5915, 6014
Arneson, T. J., 802
Arnett, C. E., 3435
Arnspiger, V. C., 4097
Arons, L., 4262, 5036
Arouet, A., 4046
Arril, D. C., 2517
Arrington, R. E., 679
Arthur, G., 4886, 4887
Asarkof, J. A., 3625
Asch, S. E., 3180
Aschaffenburg, —, 244
Aschaffenburg, G., 3513
Asher, E. J., 2599
Ashige, Y., 2198
Ask-Upmark, E., 499
Asmussen, E., 4356
Astel, K., 4956
Atwater, D., 4263
Atwell, W. J., 2760
Atzeni Tedesco, P., 860
Aubrun, E. A., 1685, 1730, 1731, 1732
Aubry, M., 3734
Augenreich, E., 6052
Auger, D., 4429
Austin, M., 3436
Aveling, F., 2705, 2761
Avery, G. T., 5573
Awaji, Y., 2166, 2328, 2329

Babcock, H., 4174, 4888
Babkin, B. P., 3704
Babskii, E., 3735
Bachler, K., 1444, 3318
Bachrach, —, 1805
Backus, O. L., 2706
Bacq, Z. M., 5141
Baeyer, W. v., 1394
Bagh, K. N., 5140
Bahr, G., 4806
Bahrmann, E., 5056
Bailey, F. W., 3269
Bailey, V., 1806
Baille, —, 1990, 3919
Bailor, E. M., 3571
Bain, R., 3483, 5916
Baisi, V., 2037
Baker, C. S., Jr., 1361
Baker, F., 4098
Baker, H. J., 1630, 2990
Baker, R. C., 5057
Baldes, E. J., 1272, 1296
Baldi, —, 1268
Baldi, F., 5058
Baldwin, O. B., 5467
Balietti, I., 5254
Bálint, M., 5468
Balken, E. R., 3181
Ball, R. J., 5347
Ballard, C. R., 2610
Bally, C., 5917
Bancroft, G., 2762
Bancroft, W. D., 2762
Banerji, M., 31, 4214, 4264
Banister, H., 2925
Banker, H. J., 1568
Bannasch, K., 3224
Banús, J. S., 3355
Baonville, H., 3839
Baranov, V. T., 3705
Baranova, L. I., 450
Baranovsky, F., 2038
Bárány, R., 5091
Baranyai, E., 4889
Barbé, J. B., 2871
Barbeau, A., 5074
Barbrock, W., 2384
Bard, P., 5092
Barden, H. E., 4890
Barlashnikov, I. A., 2747
Bark, B. T., 2039
Barker, H. F., 222
Barker, M., 2557
Barker, P. S., 1799
Barker, R. G., 470
Barkin, S., 3486
Barkley, K. L., 861, 4714, 4175, 5438
Barlow, F., 2838
Barlow, M. C., 5093
Barlow, O. W., 2793
Barnes, H. E., 3519
Barnette, W. L., 1369
Barr, A. S., 832, 1117
Barreto, A. P., 1355, 4891
Barreto, L., 1640
Barrett, J., 1686, 4957
Barron, D. H., 2748, 3270
Barros, R., 1454, 1631
Barry, D. T., 1733
Barry, H., Jr., 2241
Barry, R. C., 2253
Bartels, M., 1218, 2199
Bartemeier, L. H., 175
Barth, R., 1356
Barthelmess, H. M., 1569, 1632
Bartholomé, H., 5692
Bartholomew, W. T., 3107, 5918
Bartlett, F. C., 3691
Bartlett, M. A., 449
Bartlett, W. B., 5574
Bartley, S. H., 1269, 1270, 1271, 1734, 4258, 4952, 5059
Barton, J. W., 52, 2296
Bartoš, A., 2991
Baruk, —, 4540
Baruk, H., 2395, 2396, 2872, 3897
Barwich, M., 803
Basinger, M., 3966
Bassett, D. M., 2873
Bast, T. H., 2706
Batalla, M., 1653
Bates, S., 1010
Baudin, L., 1807
Baudouin, C., 2992, 3692, 3809, 5781, 6015
Bauer, O., 2200
Bauer, P., 3233
Baum, M., 2677, 4215
Baumann, E. D., 5255
Bäumer, G., 3437
Baumgarten, F., 570, 726, 4716, 5652, 5984
Baur, E., 1
Bauwens, L., 3427
Bayandurov, B. I., 3768
Bayer, L., 1219, 1220
Bayeri, V., 4279
Bayley, N., 1535
Bayroff, A. G., 4430
Bazett, H. C., 1294, 1755
Beacher, L. L., 3626, 3627, 3628
Bear, R. M., 4801
Beasley, W., 2201
Beccari, A., 2678
Becher, E., 5469
Beck, G., 526
Beck, G. M., 2413
Beck, L. F., 771, 1295, 3093, 4918
Beck, R. L., 4099
Beck, S. J., 4958
Becker, H., 1011, 3881, 5348
Beckham, A. S., 2459, 2874
Beckman, R. O., 3587
Beebe, E. L., 3514
Beebe-Center, J. G., 383, 1718
Beeck, P. v., 223
Beers, C. W., 944, 3882, 4526
Beers, F. S., 5920
Behn, S., 136, 2460
Behrend, F., 4802
Behr-Pinnow, — v., 5439
Beinhoff, W., 3487
Beisser, A., 4959
Beke, E., 3043
Bekhterev, V. M., 4917
Beley, P. L., 3883

Beling, I., 3271
Bell, A., 4527
Bell, J., 5182
Bell, M., 5349
Bell, W., 4919
Bellieu, R., 3356
Bellis, C. J., 3225
Bellows, R. M., 2, 2763
Bellsmith, E. B., 945
Beltrán, J. R., 1012, 4960
Belyaeva-Exemplarskaya, S., 5440
Bena, E., 4357, 4358
Benciolini, F., 1326
Benda, C. E., 2385, 5782
Bender, L., 178, 2065
Bender, W. R. G., 5094
Benedek, L., 4480, 4528, 4920
Benedek, T., 137
Benedict, F. G., 4047
Benelli, R., 1393
Benetti, B. V., 1536
Benjamin, D., 772
Benjamin, E., 5256
Benjamin, H., 2558
Benjamin, P. L., 1013
Bennett, A., 1570, 6053
Bennett, C. L., 2559
Bennett, G. V., 2541
Bennett, M. E., 5500
Bennholdt-Thomsen, C., 5237
Bennitt, R., 3272
Benon, R., 4529
Benson, D. C., 4100
Bent, A. C., 5142
Bentley, M., 2461
Benussi, V., 5196
Beresina, M., 5659, 5660
Berger, H., 81
Berger, R., 5441
Berggren, S., 4431
Bergler, E., 1445, 3319, 3810, 3811, 5783
Bergman, L. V., 2167
Beringer, K., 1396
Beritov, I., 5060
Berkson, J., 1272, 1296
Berkson, J. B., 3080
Berky, I., 3600
Berlios, C., 5298
Berlit, —, 5840
Berlucchi, C., 3337
Berman, H. H., 5841
Berman, L., 2330, 3438
Berman, R., 5023
Berman, R. I., 5989
Bernabei, M., 1014
Bernard, J., 5919
Bernard, L. L., 1966, 3483
Bernd, H. D., 4030
Bernfeld, S., 571, 2066
Bernreuter, R. G., 3588
Berry, R. J. A., 3358, 3359, 5258, 5259
Berze, J., 3360
Besser, K., 2462
Best, F., 4961
Besterman, T., 4481
Beth, K., 3, 2463, 2464, 3439
Beth, M., 224
Bethe, A., 5061
Betts, E. A., 5584
Betts, G. H., 3044, 4803
Betts, G. L., 4804
Beutner, R., 2261
Beyer, K. M., 3273
Beyne, E., 4717
Bezdek, C., 1537
Bhatia, B. B., 5661
Bhattacharyya, H. D., 4216, 4217
Bianchi, G., 4530
Bianchi, L., 82
Bickel, L., 4482
Bickerton, J. M., 1341
Biddle, S., 2465
Biddle, W. W., 2099
Bieber, I., 5095
Bieber, J., 2386
Biegel, A., 1514
Biegel, R. A., 833
Biegleisen, B., 4891
Biemond, A., 612
Bien, E., 138, 1446, 3884, 5197
Bierens de Haan, J. A., 2288, 3122, 3274, 4432
Bieri, E., 727, 4531
Bietti, G., 1221
Bigelow, N. J. T., 946
Biggam, A. G., 572
Bikov, K. M., 4359
Bilancioni, G., 3226
Bildersee, A., 2600
Billi, A., 5310
Bills, M. A., 4734
Bills, T., 862
Billström, J., 1868
Bingham, W. V., 2154, 4873
Binnewies, W. G., 1967
Binns, H., 2040
Binswanger, L., 5842
Birch-Hirschfeld, A., 32
Bircher, E., 5350
Bird, C., 5920
Birenbaum, G., 59
Birkholz, J., 863
Birnbaum, K., 2331, 5784
Bischler, W., 1646, 1756
Bishop, C. R., 1281
Bishop, G. H., 83, 1270, 1271, 1273, 1301, 1734, 1743, 1748, 5062, 5674
Bissett, L., 1538
Bithorn, —, 244
Bixler, H. H., 5499
Bixler, R. W., 1118, 6054
Bize, P. R., 3638
Bjerre, P., 1869
Björkman, A., 426
Blacker, C. P., 1852, 3885
Blackfan, K. D., 2993, 4048
Blair, E. A., 3275, 5063, 5071, 5072
Blair, H. A., 1274, 1275
Blakeslee, A. F., 1687, 3137, 4962
Blalock, J. R., 947
Blanchard, M. B., 4075
Blanchard, P., 2560
Blanchet, P., 2387
Blaschko, H., 500
Blechschmidt, E., 3138
Bleuler, E., 3108, 3361, 3886
Bleuler, M., 5198, 5260, 5830
Blinkovski, —, 5800
Bloch, G., 1357
Block, V. L., 4143
Blondel, C., 4647
Blonsky, P. P., 680
Bloomfield, A., 3675
Bloomfield, L., 2926
Blose, A., 1515
Blount, W. P., 3629
Bluemel, C. S., 2927
Blug, A., 1711
Blume, E., 304
Blume, G., 2466
Blumenfeld, W., 2663, 3601
Blumenthal, L. M., 4874
Boas, F., 303
Bobertag, O., 2601, 4893, 5199
Boda, I., 4921, 5200
Boder, D. P., 2679
Boehm, F., 2332
Boenheim, C., 4049, 4750
Boenheim, K., 1916, 1917
Bogardus, E. S., 681, 1968, 3483, 3965, 4648
Bogen, H., 225, 2839, 3620, 3812
Bognár, C., 3630, 5501
Böhm, K., 5470
Bolley, A., 226
Boltunov, A. P., 3558
Bonaparte, M., 1447, 4483, 5785
Bonaventura, E., 1539, 5096
Bond, E. D., 4532
Bond, F. B., 5786
Bond, W. R., 777
Bondy, C., 3559
Bondy, H., 1969
Bonnafoux-Sérieux, —, 3402
Bonnardel, R., 4218
Bonte, T., 5787
Bonvallet, M., 1735, 3721, 3761, 5097
Book, H. M., 1633
Book, W. F., 3227
Book, W. T., 1297, 1298
Boothe, V., 1015
Boreas, T., 60
Borel, —, 4533
Borel, A., 5843
Borel, J., 3375, 4554
Borges, C., 1448
Borgheggiani, G., 5201
Boring, E. G., 4, 2168, 3182, 5575
Bornstein, B., 306
Börnstein, W., 3139
Bosch, G., 3362
Bose, G., 176, 4219
Bose, J. P., 914
Boss, L. F., 3109
Bossard, J. H. S., 1359
Bossert, T., 1970
Bott, E. A., 3887
Boulangé, H., 3769
Bouman, H. D., 3257, 5098
Bouman, K. H., 948
Bouman, L., 177
Bourguignon, G., 2396, 3363, 3888, 4330
Bousfield, W. A., 109, 427, 864, 2241, 4433
Bouts, C., 1870
Bouts, P., 1870
Boven, W., 3813
Bowen, B. D., 4376
Bowen, E. S., 4434
Bowen, R. E., 2794
Bowers, H., 61, 471, 2742
Bowman, H. L., 4805
Bowman, K. M., 178
Bowman, L. E., 728
Boyer, P. A., 1569
Boynton, E. P., 5662
Braatöy, T., 911, 2333
Brachfeld, O., 912
Brack, E., 3440
Bracken, H. v., 3515
Brackett, F. S., 2262
Bradbury, D. E., 3589
Bradford, E. J. G., 2100, 5509
Bradford, F. T. J., 2040
Braga, E., 6055
Bragman, L. J., 3814, 5351
Brain, W. R., 5099, 5844
Bramesfeld, E., 1079
Bramsfeld, —, 3488
Bramwell, B. S., 4649
Brandes, V., 573
Brandhuber-Etschfeld, F., 1016
Brandner, F. A., 5539
Brandstätter, H., 227, 228
Brandt, A. E., 5540
Brandt, A. K., 2101
Brannom, E., 4070
Braun, E., 5788
Braun, M., 4751
Braun-Blanquet, J., 889
Braunmuhl, A. v., 845
Brecher, E. M., 4922
Breed, F. S., 3560
Brell, B., 4718
Bremer, —, 4534
Bremer, F., 4331, 4332
Brenk, H., 3306
Bressler, J., 5609
Bretas, A., 3631
Bretnall, E. P., 4416
Bretschneider, A., 5202
Brew, M. F., 5845
Brewerton, E. W., 4963
Bridgen, R. L., 4964, 5143
Bridges, J. W., 1358
Bridges, K. M. B., 3516, 3517
Bridgman, R. P., 1017
Brierley, M., 2840
Briffault, R., 1449
Briggs, T. H., 4101
Bright, E. M., 3297
Brill, A. A., 5789
Brink, W. G., 4912
Brinker, D., 1090, 1091
Briscoe, G., 1757, 5693, 5694
Bristol, H., 5564
Britt, S. H., 3815
Britton, S. W., 1328
Broadwin, I. T., 397
Broendal, V., 5352
Brogdon, E., 5100
Brolyer, C. R., 768, 1170, 4875
Bromberg, W., 3816
Bronfenbrenner, A. N., 2388
Bronk, D. W., 1191, 1276, 1682, 4329
Bronner, A. F., 1171, 5374
Bronstein, A. T., 2041
Bronstein-Schur, E. I., 5064
Brooks, C. M., 5065
Brooks, L. M., 5261
Broom, B. H., 3966
Broom, M. E., 763, 1634, 4098, 4175
Broom, R., 2194
Brotemarkle, R. A., 1397, 5560
Brotherston, B. W., 5576
Brousseau, K., 131
Brown, A. E., 1192, 2602
Brown, C. W., 1719
Brown, E. W., 2202
Brown, F., 5353
Brown, F. J., 1571
Brown, F. W., 682, 949, 3967
Brown, G. L., 2253, 4333, 4334
Brown, G. S., 1119
Brown, I. B., 2875
Brown, J. F., 5650
Brown, L. G., 3441
Brown, M. W., 5846
Brown, R. R., 3094, 4360
Brown, S., II, 2876, 3889
Brown, T. G., 5577
Brown, W., 1360, 1758, 1759, 2157, 3081, 4484, 5561
Browne, F. A., 4831
Brownell, K. A., 2776
Brownell, W. A., 2603, 4876
Broxon, J. W., 3228
Bruce, H. A., 1018
Bruce, R. H., 2289, 2290
Bruce, R. W., 3736
Bruce, W. F., 6056
Bruck, A. W., 3364
Brück, M., 4923
Brücke, E. T., 3753
Bruckner, A., 5502
Brückner, G. H., 115, 3770
Brueckner, L. J., 1120, 6057, 6058
Brundage, E. G., 1651
Bruner, D. K., 3881, 1011
Brunner, W., 3817
Brunswik, E., 472
Bryan, W. R., 875
Bucciardi, G., 2877
Buchanan, A. R., 2027
Buchanan, D. N., 3193
Bückmann, I., 913, 3890
Bucy, P. C., 3193, 5066
Buday, J., 4220
Buday, L. v., 3891
Buddenbrock, W. v., 3771
Budkiewicz, J., 5985
Buel, J., 384, 385
Buer, M. C., 1856
Bühler, C., 729, 1647, 4030, 4221, 5562, 5921, 6016
Bühler, K., 5354
Bührig, W., 683, 1971, 3968, 3969
Bujas, R., 1688
Bulbrook, M. E., 62
Bull, H. O., 549
Bullard, D. M., 4535
Bullock, L. T., 5112
Bumke, O., 5203
Bunbury, D. E., 1019
Bunch, M. E., 3229
Burch, V. S., 4667
Burdett, M., 5101
Bürger-Prinz, H., 5262
Burkesrode, J., 229
Burkhardt, F., 229
Burkhardt, H., 1398
Bürklen, K., 1222
Burn, J. H., 2254, 4335, 5661
Burnham, P. S., 349
Burnham, W. H., 3045
Burns, M., 2203
Buros, O. K., 2102
Burr, H. S., 2795
Burridge, W., 1223, 1277
Burrow, C., 2604
Burrow, T., 1399, 3892, 4650
Bursian, W., 5442
Burstein, M., 2571
Burt, H. J., 1158
Burtt, H. E., 1253, 3818
Burzlaff, W., 428
Buscaino, V. M., 179, 2764
Busemann, A., 4806, 6059
Bush, W. T., 4651
Busold, K., 5443
Büsser, H., 4336
Butler, T., 2204
Buttgereitt, H., 2334
Buvat, —, 2871

Buys, —, 4536, 4537
Buys, E., 1760
Buytendijk, F. J. J., 1329, 1761, 5144, 5145
Busoianu, G., 3230
Bychowski, G., 930, 1400, 1450, 5204
Byrom, F. R., 613

Cabitto, L., 4538
Cacchione, A., 5856
Cady, L. D., 3320
Caldwell, F. F., 3046
Caldwell, O. W., 1572
Calhoun, A. W., 1020
Calliver, A., 2103
Calligaris, G., 139
Camilovitch, C., 2042
Cammarata, A., 4102
Camp, B. H., 1608
Camp, B. M., 2389
Campanini, R., 1451
Campbell, C. G., 5755
Campbell, C. M., 951, 3893
Campbell, K. J., 1918
Campbell, P., 3573
Campbell, R. B., 2878
Campos, A., 1635, 4894
Campos, H., 5504
Campos, N., 1428, 3689
Canella, M. F., 5
Canivet, M., 308
Cannon, A., 4485, 5847
Cannon, B., 5067
Cannon, W. B., 4361, 5663
Cantele, G., 5068
Cantor, N., 1021
Cantril, H., 5922
Capgras, J., 2390, 2879, 3894, 5848
Cappe de Baillon, P., 1808
Capri, A., 5682
Cardemann, C., 5452
Cardenal, C., 4103
Carelli, A., 2994
Carey, G. L., 5943
Carl, H., 4965
Carleton, E. H., 820
Carlini, A., 4104
Carmichael, A. M., 5471
Carmichael, E. A., 498
Carmichael, L., 6, 501, 834
Caron, —, 3398, 5276
Carp, E., 1720
Carp, E. A. D. E., 2841
Carpenter, N., 1022
Carpenter, T. M., 5101
Carpenter, W. S., 5849
Carrington, H., 1872, 2335
Carris, L. H., 121
Carrol, H. A., 230, 347, 1452, 1573, 2564, 3561, 4105, 4895
Carroll, R. P., 91
Carstens, C. C., 4752
Carter, H. D., 122, 1342
Carter, M. G., 2870
Carus, C. G., 3110, 3111
Cary, W. E., 5913
Casalis, B., 3426
Case, C. M., 1972, 3970
Casey, W. R., 520
Cashman, H., 501
Caso, G., 3321
Cason, H., 92, 1264, 3183, 4300, 4305, 4306, 4652
Casotti, M., 5503
Cassirer, E., 5355
Casson, H. N., 2680
Castaldi, L., 2828, 5356
Castellino, P., 4337
Caster, J. E., 1361
Castex, E., 3737
Castle, E. S., 527
Castner, B. M., 730
Catel, W., 1092, 6017
Cattell, J. M., 2681, 3971
Cattell, McK., 500, 2263, 4362
Cattell, P., 4176, 4896
Cattell, R. B., 2842, 3518, 3602, 5564
Caussé, R., 660, 3734
Cavalcanti, B., 4897
Cavalcanti, P., 5504
Cavan, J. T., 309
Cavan, R. S., 309, 3095
Cave, H. A., 429
Cavenese, W. F., 1279
Cazzamalli, F., 5205
Cederstrom, J. A., 4807
Cénac, M., 5843
Ceni, A., 5146
Ceni, C., 4363
Chadwick, M., 140, 141, 1093
Chalisov, M. A., 1249
Chalk, A., 4652
Challiol, V., 5263
Chamberlain, C. W., 1648
Chamberlain, H. E., 1121
Chamberlain, L. M., 2605
Chambers, E. G., 4031
Chambers, L. A., 110
Chang, H. C., 2765, 2796
Chang, H. L., 2765
Chang, K. L., 3047
Chang, Y. H., 2682
Channing, A., 5444
Chapin, F. S., 1159, 5980
Chapman, D. W., 2242
Charache, H., 3365
Charitonow, S., 3779
Charles, J. W., 4808
Charpentier, R., 614, 1689
Charters, W. W., 2467, 5505
Charvát, O., 310, 311
Chase, V. A., 312
Chase, W. P., 1193
Chasnow, M., 4539
Chattock, A. P., 1809, 5147
Chauchard, A., 5690
Chauchard, A. B., 1736, 3772
Chauchard, B., 5690
Chauchard, P., 3772
Chauncey, M. R., 2104
Chavigny, M., 1853
Chavigny, P., 3895
Chen, H. S., 2105
Chen, K. C., 4809
Chen, T. S., 2928
Chen, W. K. C., 5923
Cheney, C. O., 3896
Cheney, R. H., 502
Cheshire, L., 1160
Chesire, L., 5541
Chestov, L., 3603
Chetchueva, T. A., 3194
Cheydleur, F. D., 1574
Chia, K. F., 3785
Chiavacci, G., 4924
Chiba, T., 5644
Chicago Association for Child Study and Parent Education, 3519
Child, C. M., 3273
Chin, K., 119
Chistyakov, G. A., 3231
Chmelář, V., 4051
Chopra, R. N., 914
Chou, H. W., 2106
Christensen, I., 5264
Christianens, A. G., 1172
Christie, T., 1973
Chtopicki, W., 3366
Chu, H. N., 111, 1810
Chu, K. C., 3367
Chuchmarev, S. I., 180
Chulizkaya, L. I., 2995
Church, C. F., 5265
Chweitzer, A., 2264
Ciabatti, O., 5102
Ciampi, L., 2391, 2392, 3442, 4594
Cibrario, M., 1224
Cisman, A., 3195
Ciocco, A., 4265
Claparède, E., 374, 1254, 1649, 1650, 3604, 4027, 4925
Clark, F. E., 5357
Clark, L. P., 915, 2336, 2393, 2394, 3322, 5266
Clark, M. A., 2561
Clarke, A. E., 123
Clarke, G. L., 528, 4435
Claude, —, 4540
Claude, H., 1919, 1920, 1921, 2395, 2396, 2880, 3368, 3369, 3370, 3897, 3898, 4541, 5267, 5268, 5850, 5851
Clause, K., 5472
Clayton, F., 615
Cleeton, G. U., 2664
Cleland, J. B., 2929
Clem, O. M., 6060
Clemmesen, C., 140:
Clouser, L. W., 1575
Clucas, C. S., 749
Cluley, J. B., 1122
Cobb, P. W., 804
Cocchi, A., 2881, 4364
Cochiara, G., 1453
Cochran, M., 5924
Codeceira, A., 1454
Codet, H., 3819, 5030
Coghill, G. E., 5269, 5664
Cohen, H., 616
Cohen, L. H., 865, 866, 867, 966, 5221
Cohen, M., 6018
Cohen, S. M., 1123
Cohn, A., 2397
Cohn, J., 3620
Cohn, L., 1222
Cohn, M., 3820
Colcord, J. C., 1023
Cole, W. H., 3276
Colella, R., 1278
Coleman, J. H., 2107
Coleman, S. M., 3899
Coleman, T. B., 2797, 2810
Coleman, W. H., 1576
Collamore, E. A., 1134
Collet, F. J., 5610
Collier, J. W., 4810
Collier, W. D., 4426
Collings, E., 5506
Collins, M., 2707
Colucci, C., 3112, 5069, 5473
Comenius, A. J., 5474
Commins, W. D., 529, 530, 1455, 2291
Comstock, B. J. W., 2591
Condó Arena, N., 3232
Connor, W. L., 2652, 5499
Conos, M. B., 3900
Conrad, E., 313, 2109
Conrad, H. S., 902, 1540, 2158, 2159, 2337, 4177, 4183
Connor, R., 2108, 2111
Constabile Barnabei, M., 1402
Constance, C. L., 1161
Constantine, J. F., 769
Converse, E., 462
Cook, R. C., 901, 1343
Cook, T. W., 3738
Cook, W. C., 4598
Cook, W. M., 2562
Cook, W. W., 4189
Cooke, D. H., 4811
Coombs, H. C., 487, 654
Cooper, J., 1024
Cooper, S., 5665
Cooperman, N. R., 4206, 5809
Copeland, H. A., 4901
Coplans, E., 952
Coppez, H., 4534
Corberi, G., 1965
Corey, S. M., 2982
Coriat, I. H., 5925
Corman, —, 3960
Corman, L., 5339
Cornell, E. L., 1577, 2606
Correvont, A. M., 2468
Correvont, H. E., 2468
Corry, E. I., 5270
Cortesi, T., 2882
Cory, D., 4266
Cosmovici, N. L., 3195
Costa, A., 4653
Costedoat, A., 5852
Cotton, F. S., 5695
Cottrell, D. P., 4182
Couléon, —, 5835
Coulouma, F., 3713
Courbon, P., 2398, 2883, 3371, 3372, 3373, 3374, 3901, 3920, 3972, 3973, 4542, 4543
Courthial, A., 374
Courtis, S. A., 2996
Courtois, A., 2399, 2447, 2918, 2919, 3375, 3956, 4554, 4593, 4630, 5333
Couvé, R., 3489
Covaciu-Ulmeanu, —, 3739
Cowdery, K. M., 2607, 2608
Cox, J. W., 2160, 5103
Coxe, W. W., 2110
Crabtree, E. K., 750
Crafts, L. W., 63, 473
Craig, A. T., 6114
Craig, M., 953
Crailsheim, R. F., 684
Cramer, J. F., 2609
Crane, G. W., 386
Crane, H. W., 3590
Crawford, A. B., 348, 349, 1516, 4106
Crawford, B. H., 2729
Crawford, M. P., 1651
Creak, E. M., 617
Creed, R. S., 4338, 5104
Cressey, P. G., 2489
Cresson, A., 93
Creswell, R., 3801
Creutz, W., 3443
Crichton-Miller, H., 3048
Crider, B., 5898
Crisler, G., 1297, 1298
Crockett, H. E., 1770
Cronbach, A., 5926
Cronin, H. J., 5207, 5853
Cronin, M., 4070
Crook, M. N., 430
Crosland, H. R., 2243, 3694, 5049
Crothers, B., 1094, 3902
Crouch, R. L., 5148, 5149
Crouser, R. E., 3153
Crouzon, C., 3903
Crouzon, F., 3903
Crow, S., 3277
Crowder, J. F., 5542
Crowe, S. J., 1690, 2214, 3278
Crozier, W. J., 5150, 5178
Cruz, J., 231, 2338
Cucchia, A., 2708
Cuel, J.-R., 5272
Cuff, N. B., 1578, 1579
Culbertson, E., 2930
Culmann, R., 4218
Culpin, M., 1922
Cúneo, A. C., 2400
Cunningham, B. V., 2111
Cunningham, K. S., 314, 1124
Cureton, E. E., 3082, 4159, 4160
Curran, D., 618
Curran, R. D., 5099
Currie, J. H., 2043
Curry, M. A., 5862
Curtius, F., 2401
Cushing, H., 5666
Cutsforth, M. G., 5151
Cutsforth, T. D., 4966
Cutting, C. C., 1305
Cuvillier, —, 1652

Da Costa, A. P., 4894
Dae, W. S., 4654
Dagnelie, J., 5854
D'Agostino, V., 1250
Dahlström, S., 1534
Dale, A. S., 1762
Dale, E., 2470
Dale, H., 890
Dallenbach, K. M., 387, 2167, 2203, 2660, 4926, 5024
Dalma, E., 84
Dalton, J. P., 2194
Daly, C. D., 1854
Damaye, H., 1923
Dandy, W. E., 3706
Danesino, A., 4267
Daniel, R. P., 1974
Daniélopolu, S., 5667
Daniels, G. E., 3323
Danzinger, L., 2112, 5475
Darley, J. G., 5986
Darlington, H. S., 5358
Da Rocha, F., 2884
Da Rocha, U., 3695
Darrow, C. W., 388, 389, 390, 391, 1299, 5578
Da Silveira, N. M., 6061
Daub, C. T., 2292
Davenport, C. B., 901, 2067
Davenport, E. L., 232
David, F. N., 1618
David-Schwarz, H., 1456, 2068
Davidoff, L. M., 2800
Davies, G. R., 5542
Davies, S. P., 2885
Davis, A. J., 4307
Davis, C. C., 619
Davis, E. R., 3444
Davis, F., 1653

Davis, F. C., 4308
Davis, H., 4967, 5687
Davis, J. E., 620, 3904, 3905, 4544
Davis, L., 3196, 4608
Davis, M. D., 4813
Davis, R. A., 2610, 4107, 4108, 3307
Davis, R. C., 868
Dawidenkow, S., 3307
Dawson, S., 1855, 2829, 5543
Day, C. B., 5359
Day, E. J., 315, 3908
Dayton, N. A., 1924
Dear, R. E., 3974
De Arenaza, C., 1541
DeBoer, W. C., 2931
De Busscher, J., 4545
De Candia, S., 1300
Decroly, O., 1173, 5476
Dederding, D., 4268
Dedrick, C. L., 1077
Deery, E. M., 5271
De Finetti, B., 1609
De Foney, C. G., 5445, 5446
De Gaultier, J., 3113
De Giacomo, V., 94
De Greeff, —, 4655
De Groot, A. W., 5360, 5927
De Grucy, C., 3340
de Haan, K., 3637
Del, P., 1223
De Inza, C., 4028
Del Rossi, A., 1326
De Jong, H., 934
Dékány, S., 3821
Delacroix, H., 5361
De Lange, D., Jr., 5362
De Levie, H., 2471
Del Greco, F., 1403, 1580
Dell, F., 2339
Delmas, A., 4546
Delmas, F. A., 3376
Delmas-Marsalet, —, 3707
Delov, V. E., 3260
Delvaux, A., 4898
Demay, G., 5272
Dembo, T., 2709
De Mentheon, F., 1025
Demme, H., 3906
Demoor, J., 4212
Dempsey, E. W., 5180
De Munnynck, P. M., 4223
Denés, L., 1975
De Nigris, G., 4363, 4547, 5273
Dennis, W., 1095, 1327, 1811, 2293, 2294, 3445, 3520
Densmore, F., 233, 2932, 2933, 2934
Denton, F. M., 3605
De Oliveira, M., 1636
De Oliveira Firmo, A. B., 2113
Deonna, W., 2340
De Parell, G., 805, 1041, 3907
Deputy, E. C., 2114
Derbyshire, A. J., 1279, 4967
Dérias, W., 280
Dernowa-Yarmolenko, A. A., 5696
De Rougemont, E., 4682
Derryberry, M., 1611, 1612
De Sanctis, S., 3324, 3822, 4309, 5855, 5856
De Saussure, R., 955, 2611, 3377, 5790
Deschamps, —, 5878, 5879
Deschamps, A., 3385, 3915
De Silva, H. R., 392, 806, 2169, 2733
Dessoir, M., 2665
Des Vignes Rouges, J., 1763
Detrick, L. E., 5070
Detweiler, S. R., 2798
Deutsch, F., 5791
Deutsch, H., 142, 916, 2341, 5208, 5274
Deutsch, J., 3446
De Veyga, F., 2683
De Vries, M. J., 833
Dewar, L., 1976
Dewey, J., 2170
d'Heucqueville, G., 2285, 5874
D'Hollander, F., 4548, 4549
Diamond, J. S., 1925
Dickey, J. W., 3083
Dickson, T. E., 33, 5363
Diehl, H. S., 5447
Dierks, H., 3975
Dieseldorff, E. P., 2935
Diettrich, G., 234
Dietze, A. G., 4310, 5105
Dill, D., 3233
Dill, D. B., 4366, 5697
Dimmick, F. L., 393, 394, 1226, 2171, 4968
Dimock, H. S., 1542
Ding, G. F., 1543
Dittrich, O., 1462
Di Tullio, B., 1457, 1977
Divry, —, 4550
Dmitriev, G., 4421
Dobrin, J., 2983
Dobson, M., 5611
Dockeray, F. C., 4814
Dodd, M. R., 3049
Dodge, H. L., 7, 751
Dodge, R., 5698
Dodge, S. B., 6060
Dodson, J. D., 503
Doering, C. R., 1924
Dohrmann, P., 4367
Doiteau, —, 3376
Doktorsky, A., 3843
Dolan, H. H., 1924
Dolder, E., 3490
Doll, E. A., 621, 622, 956, 1404, 1581, 2402, 2403, 2404, 2405, 2406, 4551, 5275, 5857
Dolton, I., 5364
Dominguez, C. V., 4969
Donaldson, H. H., 2255
Donalls, G., 1926
Donáth, J., 4552
Donovan, H. L., 1579
Dontcheff, L., 3773
Dopff, C. S., 3823
Dorcus, R. M., 395, 531, 4029, 5152
Dordi, A. M., 2766
Dorer, M., 917
Döring, W. O., 3606
Doross, H., 3447
Dorozewski, W., 5365
Dörr, J. N., 112
Dos de Willebois, J. M. M. v. d. 2886
Dosužkov, T., 1405, 4368, 4369, 4553
Douglass, H. R., 2115
Dowd, C. E., 1582
Downey, J. E., 124, 1764, 2767, 4899
Downing, C. M., 4109
Drabovitch, W., 1765
Draba, J., 1644
Dragotti, G., 2768
Drake, C. A., 1583
Drake, R. M., 5928
Dreikurs, R., 1026, 4486
Dreis, T. A., 5037
Dresser, H. W., 3824
Drever, J., 3172
Driberg, J. H., 235
Driesch, H., 8, 1871, 3114
Droba, D. D., 1978, 1979, 1980, 3366
Drouin, A., 105
Drury, A. N., 5699
Duane, A., 3632
Dubitscher, F., 623, 3378
Dublineau, J., 3368, 3388, 5276, 5867
Dublineau, M., 3528
DuBois, F. S., 2801
DuBois, P. H., 3391, 5367
Dubreuil, H., 2542
Dubuisson, M., 5741
D'Ucel, J., 2936
Dudley, E. E., 1872
Dudley, V., 1544
Dudycha, G. J., 5508, 6019
Dudycha, M. M., 6019
Dufet, —, 2447
Duffy, E., 95, 96
Dugas, L., 2407, 3825
Duke-Elder, W. S., 1691
Dulsky, S. G., 835, 3987
Dumas, G., 1654, 2205, 3976, 3977, 4269, 4656
Dumont, P., 1736
Duncker, K., 1655
Dundas-Grant, J., 3140
Dunkelberger, G. F., 474
Dunlap, J. W., 365, 3774
Dunlap, K., 51, 869, 1517, 2799, 3448
Dunn, D., 2079
Dunn, H. L., 1162
Dunn, M. W., 6076
Dupouy, R., 3908, 3909, 3978, 4554
Duprat, G. L., 1406
Dupree, H., 4815
Du Prees, N., 2044, 5997
Durham, F. M., 5183
Durling, D., 4110, 4900
Durost, W. N., 2997
Durup, G., 2206
Dusser de Barenne, J. G., 113, 3775, 4339, 5153
Dutton, M. B., 4970
Dvorak, B. J., 5447
Dwelshauvers, G., 3696, 3826
Dyer, J. R., 4719
Dynes, J. J., 1125

Eager, R., 685
Eagle, E., 1328, 1766
Earp, J. R., 574
Easley, H., 4816
Eaton, H. S., 5929
Ebaugh, F. G., 2887, 3910
Ebbers, H., 5792
Ebbinghaus, H., 3115
Ebert, E. C., 4270, 4295
Eccles, A. M., 1981
Eccles, J. C., 3740, 5668
Eckerström, S., 1407
Eckert, H., 5477
Eckhardt, K., 1656
Eckstein, A. R., 5277
Economo, C., 3343
Edda, J. H., 3592
Edelhaus, M., 5278
Edgell, B., 1657
Edmiston, R. W., 3050
Edridge-Green, F. W., 4971
Educational Press Association of America, 4817
Edwards, A. S., 4657
Edwards, H., 3230
Edwards, H. T., 5697
Edwards, K. H. R., 3379, 3827, 3828
Eells, W. C., 350
Efrussi, P. O., 2563
Egan, E. P., 2612
Eggenwieler, P., 2937
Eggink, H., 5509
Egner, F., 143
Ehrenberg, R., 181
Ehrenfeld, H., 5279
Ehrenstein, W., 3793
Ehrenwald, H., 3741
Ehrhardt, A., 1767
Eichler, W., 3708
Eick, —, 1768
Eigler, P., 316
Eilks, H., 4487
Elam, M. K., 4848
Elder, J. H., 5731
Eliasberg, W., 182, 686, 937, 1458, 1545, 2472, 3979
Eliopoulos, S., 3363, 3888
Eliot, A. A., 4753
Eliot, T. D., 1027, 2938, 5368
Ellenberger, —, 5848
Ellermann, M., 4382, 4555
Ellis, H., 2939, 3325
Ellis, W. D., 2808, 2809, 3776, 4436
Ellison, C. E., 1039
Elmer, M. C., 4658
Elmgren, E., 5140
Elster, A., 5930
Elwell, M., 1120
Emerson, H., 575, 958
Emerson, L. E., 3829
Emery, E. V. N., 2940
Emma, M., 4556
Endicott, F. S., 6062
Endres, G., 3141
Engel, S., 624, 4557
Engelhart, M. D., 1126
Engelking, E., 4972
Engelmann, B., 3234
English, H. B., 1194
Enke, E., 3173
Enke, W., 463
Enselen, N., 144
Erdélyi, M., 4720
Erhardt, A., 532, 5997
Erickson, M. H., 3326, 5794
Eriksen, R., 576
Erlacher, C., 4488
Erlanger, J., 3275, 5063, 5071, 5072
Erlenmeyer, E. H., 2843
Erschowitz, N., 2045
Esper, E. A., 396, 3116, 4659
Etziony, M., 2998
Eurich, A. C., 1136, 2613, 2769, 4818, 5107, 6121
Evans, A. E., 3911
Evans, H. M., 891
Evans, J. E., 4030
Evans, S., 533
Evans-Pritchard, E. E., 1982
Everett, E. M., 5369
Everett, M. S., 236
Evola, J., 2844
Evrard, E., 5858
Ewald, G., 625, 3830, 5859
Ewell, B. C., 2607, 2608
Ewert, P. H., 475, 509, 4370
Exner, —, 244
Ey, H., 1920, 1921, 3898, 4533, 4540, 4558
Eyre, M. B., 3233
Eyrich, M., 2888, 3380
Eyster, J. A. E., 2706, 4973
Eysymontt, M., 475
Ezekiel, M., 366, 4161

Fabritius, H., 4559
Fahrenfort, J. J., 5931
Faillie, R., 5579
Fairbank, R., 3912
Fairbank, R. E., 3449
Fajans, S., 2999, 3000
Falk, E., 281
Fallert, F., 431
Fancher, J. K., 2770
Fantini, O., 4660, 4661
Farel, O. L., 3936
Faris, E., 3483
Farley, R. L., 3001
Farmer, E., 4031, 5448, 5449
Farnsworth, P. R., 504, 1028, 1251, 4662
Farr, C. B., 183
Farrar, C. B., 3607
Farrell, J. I., 2749
Farthing, F. R., 5023
Faucett, L., 2941
Favill, J., 1737
Fay, T., 5860
Fayol, H., 5450
Feder, D. D., 5510
Federn, P., 2342, 3913, 4371
Fedorov, V. C., 5108
Fee, M., 5570
Feigenbaum, D., 2343, 2845, 3795
Feilchenfeld, W., 5580
Feinberg, H., 1637
Feinbloom, W., 46, 3633
Feingold, G. A., 4819
Felder, J. G., 1546
Feldman, S., 397
Feldmann, S., 577, 578
Feller, F. M., 3184, 3327, 3491, 3492, 3493, 3494, 3495, 3496
Fellows, J. E., 2614
Feng, T. P., 5660, 5669
Feng, T. Y., 2116
Fenichel, O., 145, 2332, 2344, 3831, 5796
Fenn, W. O., 2771
Fenton, N., 345, 1090, 1091, 1096, 1097, 1127, 1408, 2617, 4820
Fenyves, E., 398
Fenyvesi, A., 5209
Ferenczi, S., 5210
Ferguson, A., 1692
Ferguson, G. B., 3381
Ferguson, G. O., Jr., 4111
Ferguson, J. H., 1738
Ferguson, L. K., 1276
Fernberger, S. W., 9, 34, 2172
Ferrari, G. C., 1098
Ferraro, A., 2800
Ferree, C. E., 432, 807, 808, 1227, 3142, 3143, 4271, 4974, 5581
Ferrer, C. O., 1547
Ferreri, —, 1228
Ferreri, G., 1409, 2069, 5370

Ferrio, C., 4560
Ferro, A., 778
Fessard, A., 2265, 3742, 5700
Fessard, A. B., 5700
Fetscher, R., 687, 3980
Fetzer, H., 3382
Feuerlicht, I., 3981
Fick, M. L., 4178
Field, G. C., 2942
Field, H. E., 1983
Fields, P. E., 534, 1812
Fieller, E. C., 1610, 5544
Finch, F. H., 1128, 2564, 3309
Finckh, J., 5861
Findlay, J. J., 2117
Findley, W. G., 5565
Fineman, A., 1080
Fiorentini, A., 5478
Fiorentini, R., 3497
Firestone, F. A., 5613
Firor, W. M., 2772
Fischel, W., 1329, 1813, 1814, 5145, 5154
Fischell, E., 146
Fischer, A., 351, 3634, 4927, 5511
Fischer, C. H., 6115
Fischer, E., 4471
Fischer, F., 4272
Fischer, G. H., 4487
Fischer, H. T., 4663
Fischer, M., 561, 3802, 3832, 4052
Fischer, M. H., 433, 5073
Fischer, M. L., 1548
Fischl, J., 1723
Fish, M. W., 2786
Fisher, D. F. C., 731
Fisher, I., 3236
Fisher, J. W., 685
Fisher, M. S., 3002
Fisher, R. A., 1344, 4877
Fisher, V. E., 918
Fishman, J. F., 919
Fitzgerald, J. A., 1129, 2615
Flack, M., 4372
Flatau, G., 2408
Fleck, U., 3914
Fleisch, A., 4373
Flemming, C. W., 2656, 3562
Flemming, E. G., 464, 920, 1029, 1362, 3003, 4112, 4301, 4489
Flerov, O., 2118
Fletcher, H., 2473
Fligelman, F., 1459, 3450
Flora, F., 5371
Flournoy, H., 3833, 4490
Flügel, J. C., 2345, 4311
Foà, C., 1345
Foerster, O., 846
Foester, J. F., 1984
Föh, H., 5155
Foley, J. O., 2801
Folly, —, 4664
Fonseca García, M., 1460
Forbes, A., 1279, 5074, 5722
Forbes, A. W., 5756
Forbes, T. W., 2273, 4928, 5031
Ford, A., 3117
Fording, H. L., 3635
Forestier, J., 2895
Forman, H. J., 5479
Forster, M. C., 4498
Fortes, M., 1724
Förtsch, A., 5211
Fortune, R. F., 1461, 2943
Fortuyn, A. D., B. 562
Fosbroke, G. E., 2846
Foster, J., 2070, 2207
Foucault, M., 809, 2244, 3593
Foundillère, R., 5800
Fourche, J., 1927
Fox, E., 959
Fox, A., 3383, 4561
Francès, —, 3972
Francès, Mme., 4542
Franceschi, G. J., 1549
Francis, K. V., 4754
Francke, H., 317
Frandsen, A., 1584
Frank, C., 399
Frank, G., 3519
Frank, J., 1030, 3834
Frank, L. K., 1031
Frank, M., 1333
Frank, M. H., 903
Fränkel, F., 772
Frankel, G., 3777
Fränkel, J. S., 5075
Frankhauser, K., 3118
Franklin, F. E., 1985
Franz, S. I., 1658, 3119, 5280
Fransen, R., 1611, 1612
Fransen-Hellersberg, L., 1986
Fraser, J. A., 5988
Fraser-Harris, D. F., 579, 5612
Frasier, G. W., 6063
Frazier, B. W., 4804
Frazier, E. F., 4665
Frede, L., 1032
Fredericq, H., 3709
Freedman, B., 2944, 5213
Freedman, S. B., 5212
Freeman, E., 35
Freeman, F. N., 364, 6020, 6064
Freeman, F. S., 773, 2182, 4821
Freeman, G. L., 505, 870, 921, 2266, 5480
Freeman, H., 5797
Freeman, N. E., 1280
Freeman, R. G., 1739
Freeman, R. S., 5480
Freeman, W., 184
Freistadt, S. G., 352
Freistadt-Lederer, A., 732, 1873, 3563, 4113
Fremel, F., 960
Frenzel, H., 2945
Freta, G. P., 904
Freud, S., 147, 148, 149, 961, 962, 1874, 1875, 2346, 2847, 3835, 5213
Freund, H., 688, 3451
Frey, E., 3328
Fribourg-Blanc, —, 2889
Fridman, A. A., 3710
Friedjung, J. K., 4053, 5481
Friedlander, M. I., 237
Friedman, B., 3144
Friedmann, A., 2347, 3004
Friedmann, H., 535
Friedmann, L., 810
Fries, H. S., 4324
Frisch, K. v., 3279, 3778
Frischeisen-Köhler, I., 4472, 5109
Frith, C. D., 1550
Fröhlich, F. W., 2710, 2711
Frois-Wittman, J., 5798
Frolow, J., 3779
Fromherz, H., 5670
Fromm, E., 4491
Fröschels, E., 811, 1262
Frost, S. W., 4437
Fry, C. L., 2946
Fry, G. A., 4975
Fryer, D., 2666
Fuchs-Kamp, A., 2071
Fueter, R., 3084
Fujibayashi, K., 2474
Fuller, R. G., 5892
Fülöp, I., 5214
Fulton, J. F., 1195, 1769, 3280, 5095, 5156
Furbay, J. H., 536
Furfey, P. H., 1560, 3545
Furtmüller, C., 1033
Fuster, J., 3452

Gabriel, E., 963
Gaehr, P. F., 3608
Gage, F. H., 2712, 2728, 4297, 5582
Gahagan, L., 2348
Gaines, N., 110
Gaines, W. L., 4878
Galand, G., 4562
Galatschian, A., 626, 3307
Galdo, L., 97, 5038
Gale, A. V., 4755
Gallerani, G., 1229
Galli, A., 4374, 4756, 4976, 4977
Gallis, P., 4438, 4466
Galperin, S. I., 2774
Galt, W., 3453, 5215
Gamble, G. C., 4804
Gamper, E., 5281
Gantschewa, S., 2072
García, P. D., 1613
Garcin, R., 3758, 3759
Gardiner, A. H., 689
Gardner, D. A., 4666
Gardner, L. P., 5157
Garma, A., 3329, 3836
Garnett, J. C. M., 3085
Garrett, H. E., 11, 5566
Garrey, W. E., 875
Garrison, K. C., 1099, 1463, 2006, 4492, 4667
Garry, R. C., 4333
Garth, T. R., 2475, 3454, 4114
Gartner, P., 1928
Garvey, C. R., 3145, 5701
Garwood, F., 5543
Gasca, M. D., 2046
Gaskill, H. V., 3818
Gaspar, J., 5932
Gasser, H. S., 1740, 5671
Gassert, K. G., 2565
Gates, M. F., 4439
Gatti, A., 1230, 4273
Gaudet, F. J., 2947, 3455, 4032, 5862
Gaudissart, —, 4563
Gaudissart, P., 674
Gaule, A., 5282
Gaunt, R., 1815
Gaupp, L., 1929
Gausewitz, W., 4822
Gaw, E. A., 5732
Gebbing, M., 5283
Geiger, P. H., 5613
Geissler, G., 5933
Gelb, A., 1231, 5614, 5934
Geldard, F. A., 434
Gelderblom, J. J., 5110
Gelfan, S., 1301
Gelhorn, E., 4274
Gellermann, L. W., 2684, 2802, 2803
Gellerstedt, N., 847
Gemelli, A., 4033
Genil-Perrin, J., 964
Gentile, N., 1410
Genta, W., 238
Gentz, —, 244
George, W. C., 2685
Gerard, R. W., 4328, 4340, 4348, 5076
Gerberich, J. R., 6065, 6066
Gerd, F., 4716
Gergő, E., 3609
Germain, J., 1318, 1956
Gerő, G., 2848
Gerőcz, K., 4224
Gershuni, G. V., 2773, 4341, 5077
Gerstner, H., 2476
Gerta, H., 1232
Gerzberg, R., 1930
Gesche, I., 4114
Gesell, A., 3005
Gesell, R., 2267
Geshelina, L. C., 2566
Geymonat, L., 1659
Ghidionescu, V., 4225
Giani, —, 1363
Gianotti, M., 1302
Gibbs, O. S., 5702
Gibson, J., 4929
Gibson, J. J., 871, 3146
Gideonse, H., 3519
Giese, F., 282, 3498, 3620, 3451, 5452
Gilbert, H. H., 2984
Gilbert, L. C., 5111
Gilbert Robin, —, 2073
Gildea, H., 3521
Gill, R. S., 3448
Gillespie, R. D., 4564
Gillett, J. D., 892
Gilliland, A. R., 4115, 5512
Gillin, J. L., 2477
Gilmer, B. v. H., 6021
Gilmore, M. R., 2948
Giltay, H., 1364, 2478
Gilula, T. O., 1931
Ginetsinskii, A. G., 2774
Ginsburg, S., 627
Girden, E. S., 1816
Gist, N. P., 690
Glaser, J., 628
Glassburg, J. A., 3456
Glans, A., 3384
Glcispach, —, 244
Glenn, O. E., 2479
Gliddon, G. H., 800, 801, 1215
Glover, E., 580, 1876, 1987, 2849, 2890, 3982, 5799
Glueck, B., 965
Glueck, S., 1034, 3457, 3983
Goadby, A., 1872, 3780
Goblot, E., 98
Goddard, H. H., 2409, 3031
Goemans, A., 4565
Goldberg, B., 2087
Goldberg, N., 5513, 5583, 5935, 6067
Goldberger, E., 2949
Goldberger, M., 5284, 5285
Goldberger, S., 1302
Goldenberg, E. E., 3197, 3219
Goldenberg, M. A., 1411
Goldenweiser, A., 3984
Goldman, J., 4075
Goldschmidt, R. H., 1660
Goldschneider, L., 472
Goldstein, J. L., 2811
Goldstein, K., 5615, 5863
Goldstein, N., 283, 4721
Goldstein, W., 2173
Goldthwait, C., 2208
Golikov, N. V., 5078
Gollwitzer-Meier, K., 3711
Golomb, A., 3174
Gonggrijp, G., 5372
González, A. W. A., 2804
Good, C. V., 1585, 2119
Good, T. S., 1988
Goode, D., 4566
Goodale, H. D., 2830
Goodenough, F. L., 3522, 4375, 4757, 4823
Goodfellow, L. D., 2616, 5616
Goodsell, W., 1035
Göransson, E., 1932
Gordon, A., 901, 4567, 5286
Gordon, K., 1658, 3119
Gordon, M. A., 3052
Gordon, R. G., 2891, 2892
Gorkin, S., 3237
Gorodsov, V. A., 5936
Gorovoi-Shaltan, W. A., 2047, 2048
Gorriti, F., 3362
Gos, M., 4342
Gosney, E. S., 5287
Göthlin, G. F., 426
Gött, T., 4054
Gottschalk, R., 752
Gottsegen, G., 5079
Götz, B., 581, 3458
Götz, W., 185
Gould, H. N., 3053
Gowen, J. W., 2831
Grace, A. G., 2543
Gradle, H. S., 4275
Graewe, H., 3985
Graf, O., 375, 1174
Graham, C. H., 85, 2805
Graham, F. B., 5499
Graham, H. T., 1740, 5671
Grahe, K., 5068
Grahmann, B., 4978
Granada, A., 4103
Grandprey, M. B., 3523
Granich, L., 3330
Graniger, K., 2480
Granit, R., 4979, 5617, 5668, 5672
Granström, K. O., 1233
Grant, F. C., 4980
Grant, M. E., 1255
Grantin, I., 4727
Grasemann, P., 1222
Grassberger, R., 239
Grasselli, G., 779
Gran, R., 1036
Graucob, K., 6022
Graves, A. D., 2617
Graves, B. C., 518
Graves, G. O., 5057
Graves, T. C., 629, 2410, 4568
Gray, C. E., 4081
Gray, J. S., 1256, 2618
Gray, R. A., 4869
Gray, W. L., 531
Gray, W. S., 1130, 2619, 6068
Greber, J., 2850
Green, G., 2032
Green, H. J., 4207, 5989
Green, M., 1905
Greene, C. W., 4376
Greene, E. B., 10, 1175, 3636
Greene, H. A., 2620, 5584, 6069
Greene, J. E., 3096
Greenman, E. F., 2950

Greenwood, —, 284
Gregersen, M. I., 5112
Gregg, D., 2411
Grégoire, A., 6023
Gregor, A., 4116
Grimm, H. D., 367, 1163, 1614, 4162, 4879
Griffiths, D. C., 240
Grigsby, O. J., 3524
Grijns, G., 3637
Grimes, E., 1933
Grindley, G. C., 1809, 2806, 4930, 5147
Groddeck, G., 2481
Groenback, V., 241
Grollman, A., 2772
Groos, K., 3986
Gros, B. J., 1693
Gros, R., 353
Gross, K., 2349, 2713, 2714, 2807
Grossnickle, F. E., 2621
Grotjahn, M., 922
Groves, E. R., 1131, 3987
Grudin, L., 691
Gruebl, M. A., 2350
Gruehn, W., 242
Gruenberg, B. C., 733, 1132
Gruenberg, S. M., 731, 1100, 1132
Gruhle, H. W., 1412
Grünberg, G. Yu., 5113
Grund, E., 5937
Grundfest, H., 1741, 5673
Grünhut, L., 243
Guild, J., 4981
Guiler, W. S., 753, 3075, 6070
Guilford, J. P., 11, 780, 3147, 4668, 5035, 5291
Guilford, R. B., 4668
Guillain, G., 3638
Guillaume, G., 5938
Guillaume, P., 1234, 1661
Guiraud, P., 3385, 3915
Gulliksen, H., 400, 3697
Gullotta, G., 2764
Gulotta, S., 5080
Gumpertz, K., 2412
Gun, W. T. J., 1856
Gunn, J. A., 314
Gunther, H., 4276
Gurevich, M., 5703
Gurnee, H., 4982, 5595
Gutheil, E., 5216
Guthrie, C. C., 5158
Guthrie, E. R., 2686, 5039
Gutstein, C., 1081
Gutteridge, M. V., 314
Guttmacher, M. S., 4669
Guttman, E., 3386
Guttmann, A., 692
Gyllensvärd, N., 3837

Haber, A., 1257
Haberlandt, A., 1037
Hack, E. R., 4440
Hackl, K., 3499
Haeger, F., 231, 2338
Haessert, J. P., 5373
Hafter, E., 3639
Hagedoorn, A. C., 2317
Hagedoorn, A. L., 2317
Hagman, E. P., 4055
Hagman, R. R., 4056
Hahn, H., 4276
Hahnert, W. F., 537
Hakebush, —, 5800
Halasy-Nagy, J. v., 3610
Haldane, J. B. S., 1857, 4330
Haldane, J. S., 888
Hales, N. M., 376
Hales, W. M., 893
Hall, C. S., 4416
Hall, C. W., 6071
Hall, D. E., 3916
Hall, F. S., 1038
Hall, J. C., 1298
Hallowell, D. K., 1638
Halverson, H. M., 734
Hamilton, J. A., 2808, 2809, 4436
Hamilton, W. F., 35, 1303, 2797, 2810, 2811
Hammerschlag, V., 3148, 5757
Hammouda, M., 5704
Hanawalt, E. M., 5159
Hancock, W., 888
Handtmann, E., 1662
Haney, G. W., 928
Hanfmann, E., 2709, 3006
Hanley, M. L., 3459
Hanna, J. V., 582
Hanselmann, H., 4931
Hansen, R., 4813
Hansen, S., 5288
Hanson, R. L., 3525
Hapke, —, 244
Hapke, E., 3988
Happrich, C., 1413
Hara, S., 2351
Harding, D. W., 2775, 3990
Harding, F. C., 3431
Harding, G. T., 5864
Hardwick, L., 4318
Hare, W. K., 491, 492, 1286
Hargan, J., 377
Harlow, H. F., 538, 544, 630, 829, 1817, 2295, 2739, 3281, 5754
Harms, E., 150, 923, 1196, 2482, 2483, 4670
Hárnik, E. J., 151, 2851
Hárnik, J., 2852, 5801
Harriman, P. L., 5114
Harrington, M., 5865
Harris, A. J., 1039
Harris, E. T., 4271
Harris, G. S., 3455
Harris, S., 4569
Harris, W., 631
Harrower, M. R., 2245
Hart, B., 2893
Hart, C. W., 4694
Hart, E. B., 4493
Hart, H., 2951, 4493, 5902
Hart, J. K., 4824
Hartenstein, E., 3500
Harter, R. S., 3564
Hartge, M., 2484
Hartline, H. K., 85
Hartman, C. G., 2318
Hartman, C. J., 1339
Hartman, F. A., 2413, 2776, 4376
Hartman, G., 2120
Hartman, M. L., 2670
Hartmann, A., 245
Hartmann, G. W., 64, 1304, 4117, 4277, 4278, 5618, 6072
Hartmann, H., 4570, 5184
Hartmann-Karplus, D., 3526
Hartree, W., 2268, 4377, 5705
Hartridge, H., 1694, 5585
Hartshorne, H., 693, 3519
Hartson, L. D., 354
Hartwell, S. W., 4758
Harvey, O. L., 1176, 1770
Hasdenteufel, I. E., 285
Haselmayer, H., 5289
Hasegawa, T., 3282
Haskell, R. H., 2414
Haskovec, L., 3238
Hassin, G. B., 5081
Hassler, J. O., 12
Hastings, A. B., 4406
Hatano, I., 2567
Hatfield, W. W., 3054, 4118
Hathaway, S., 1742, 1771
Hathaway, W., 3055
Hattendorf, K. W., 4057
Hattingberg, H. v., 1934
Hattwick, M. S., 2538
Hause, E., 4187
Hauser, P. M., 2568
Hauser, R., 5586
Hausman, G., 3743
Hausmann, M., 2544
Hausmann, M. F., 781, 5160
Hausmann, T., 1695
Haven, S. E., 4901
Hawker, L. E., 1818
Hawley, J. M., 5733
Hayami, H., 2209, 2485
Hayasaka, C., 924, 4494, 5802
Hayashi, I., 4441
Hayes, E. D. T., 5847
Hayes, M. H. S., 2049
Healy, W., 5374
Heape, W., 3283
Heath, E., 4759
Hecht, K., 3198, 3208, 3717
Hecht, S., 3640, 4983, 4984
Hedman, H. B., 4190
Heering, G. A., 318
Hefner, R. A., 3958
Hegge, T. G., 2415
Heidbreder, E., 3611
Heider, F., 2210
Heider, G. M., 2211
Heilandt, A., 286, 1082
Heiler, C., 3331
Heilman, J. D., 2121, 4163, 4825
Heinbecker, P., 1281, 1743, 1744, 1748, 5062, 5674
Heindl, R., 5939
Heinitz, W., 1464
Heinlein, C. P., 401
Heinrich, —, 3527
Heinrich, A., 5061
Heinrich, E., 2352
Heinrich, W., 1235, 4312, 4313
Heinze, H., 5645
Heiser, F., 1236
Heiss, A., 65
Held, O. C., 6073
Heldt, T. J., 3917
Hellebrandt, F. A., 99, 5100
Heller, R. E., 2812
Heller, T., 3918
Hellwald, H., 1819
Hellwig, A., 1465, 5375
Helman, L., 1551
Helmreich, E., 4058
Helsmoortel, J., 3387, 5770, 5866
Helsmoortel, J., Jr., 4571, 4985
Helson, H., 812, 1663, 2212
Helwig, D., 4729
Hemingway, A., 100, 5115
Hendrick, I., 3838
Hendricks, W. A., 1615
Henggi, G., 5217
Hengstenberg, A., 872
Henig, M. S., 2545
Henke, K., 3781
Henneman, R. H., 1327, 2293, 2294
Henning, H., 782
Henning, H. F., 66
Henriksen, K. Z., 4986
Henry, G. W., 632, 2416
Henry, T. R., 3481
Hentig, H. v., 244
Herberts, H., 694
Herbertz, R., 1466, 1725, 1989, 3332
Herbst, E. K., 6043
Herlitz, C. W., 1101
Hermann, E., 2246
Hermann, I., 5218, 5734
Hermann-Ciner, A., 4826
Hermsmeier, F., 3333
Heron, W. T., 893, 5587
Herren, R. Y., 1040, 3149
Herrick, C. J., 2687
Herrman, J., 5997
Herrmann, M., 4059
Herskovits, M. J., 246, 3519, 3989
Hertz, M., 539
Hertzberg, O. E., 2622
Herz, T., 4572
Herzberg, A., 186
Herzer, W., 2050
Herzfeld, E., 6024
Hesnard, A., 3334
Hess, W. R., 4343
Hetzer, H., 4760, 5562, 6025, 6119
Heun, E., 13, 783
Heuyer, —, 5268
Heuyer, G., 1414, 1990, 2417, 3388, 3389, 3829, 3919, 5867, 5868, 5869
Heuyer, M., 3528
Hevner, K., 1177, 4671
Heyer, G. R., 1664
Heymans, C., 5116
Heymans, G., 2174, 1665
Heynemann, M., 1365
Hicguet, G., 4534
Hidalgo, M., 5428
Hiestand, W. A., 2813
Hild, H., 695, 696, 784
Hildreth, G., 1178, 3565, 6074
Hildreth, G. H., 3097
Hilferty, M. M., 1924
Hilgard, E. R., 4378
Hilgard, J. R., 2074
Hill, A. V., 848, 1745, 2269, 4344, 5670
Hill, G. E., 2952
Hill, J. P., 2814
Hillie, J. W. L., 2122
Hilleboe, G. L., 2123
Hiller, F., 3712
Hillier, W. T., 3782
Hilton, R. A., 3147
Hilton, W. A., 2688
Himes, N. E., 1346
Hinckley, E. D., 1179
Hinderman, R. A., 4122
Hinds-Howell, C. M., 633
Hines, E., 4672
Hines, M., 3150, 5662
Hingston, R. W. G., 1330
Hinrichsen, O., 187
Hinsey, J. C., 1282, 1305, 3252
Hinst, B., 5256
Hippius, R., 402, 4314
Hirose, K., 2213
Hirsch, J., 2486
Hirschfeld, M., 5803
Hirschfeld, R., 188
Hirschfelder, A. D., 3612
Hirschhausen, H., 1519
Hirvonen, M., 3239
Hitschmann, E., 3840, 5804
Hoagland, H., 435, 488, 3284, 3784
Hoakley, Z. P., 2667
Hoche, A. E., 1935
Hochheimer, W., 1283
Hochholzer, H., 735
Hodges, J. H., 4155
Hodgkiss, M., 3460
Hodgson, P., 1772, 5683
Hoeffer, P., 3199
Hoff, E. C., 849
Hoff, H., 1284
Hoffer, —, 1936
Hoffer, H., 1041, 3907
Hoffmann, A., 4119, 5482
Hoffmann, B. T., 3921
Hoffmann, H. F., 3390, 5870
Hoffner, M., 1042
Hogben, L., 5185
Hogbin, H. I., 2953
Hogen, H. P., 834
Hohenstein, A. E., 1586
Hoke, R. L., 873, 4827
Holch, H. G. O., 4495
Holcomb, G. W., 2060, 4722
Holcomb, W. M., 4114
Holland, B. F., 2175
Hollander, B., 3613
Hollen, H., 4496
Hollingshead, L., 52, 2296
Hollingworth, H. L., 2623, 4497
Hollingworth, L. S., 319, 1102, 1477, 2569, 2624, 4761
Holman, C. T., 1043
Holman, P., 2777
Holmes, G., 671, 3461, 5675
Holmes, S. J., 247
Holmes, T. C., 320
Holstijn, J. W. W., 189
Holtgrewe, A., 2487
Holzinger, K. J., 368, 6116
Homes, G., 4331, 4332
Honegger, R., 403
Hooton, E. A., 5359, 5376
Honzik, C. H., 1837, 2297
Hooker, D., 2815
Hope, C., 583
Hopkins, A. E., 4442
Hopkins, L. T., 6075
Hopkins, P., 1467
Hoppe, F., 53
Hopwood, J. S., 3990
Hornbostel, E. M., 4987
Horinson, —, 1990
Horney, K., 152
Horowitz, J., 5602
Horst, P., 54, 404, 770, 1164, 1165, 1166, 3086, 4164, 4179, 4880
Horton, G. P., 2298
Horton, H. S., 3641, 3744
Hösch-Ernst, L., 3391
Hosey, G., 5483
Hoskins, R. G., 3745
Hosoya, Y., 4279
Hotto, S., 2853
Hou, C. L., 3785
Hovde, H. T., 4723
Hoven, H., 5871, 5872
Howard, L. O., 813
Howe, E. G., 5290
Howe, E. M., 5186
Howe, M. E., 2124

Howe, R. L., 183
Howell, E., 6076
Howell, S. C., 4497
Howells, T. H., 784, 3120, 3462, 4226, 4673
Hoy, J. D., 4828
Hrabovszky-Révész, M., 4345
Hsiao, H. H., 2743, 4177
Hubbard, L. D., 645
Huber, K., 270
Hübsch, L., 2570
Hudgins, C. V., 797, 4379
Hudson, C. E., 1976
Huergo, A., 4573
Hufnagel, E., 4120
Hughes, E. C., 4674
Hughes, L. S., 4067
Hughson, W., 2214, 3278
Huhn, R. v., 3121
Huisinga, E., 5735, 5736
Hulin, W. S., 5588
Hull, C., 798, 5607
Hull, C. L., 4498, 4499
Humm, D. G., 563, 3803, 4180, 5514
Humm, K. A., 5514
Humphrey, G., 2270
Humphreys, P. A., 5483
Hungerford, H., 1666
Hunsicker, L., 4181
Hunt, H. R., 3755
Hunt, J. M., 5291
Hunt, J. R., 2418, 4380
Hunt, W. A., 55
Hunter, E. L., 3463
Hunter, W. S., 2299, 4381
Huntington, E., 901
Huntington, E. V., 1167
Hurlock, E. B., 321, 2571
Hurst, A. D., 1133
Hurst, C. C., 3804
Husband, R. W., 1197
Husse, R., 5377
Hutt, M. L., 4182
Hutton, I. E., 1991
Huxley, J. S., 1820
Huzella, T., 5589
Hyman, L. H., 1821
Hynek, R. W., 2854

Ide, G., 2625
Iljon, I. G., 3392
Imber, I., 1415, 4574
Imm, A. J., 841
Immig, G., 287
Ingebritsen, O. C., 540, 4346
Ingle, W. J., 893
Ingram, M. L., 3056
Ingram, W. R., 489
Inman, V. T., 3215
Irvine, J. F., 4829
Irwin, F. W., 34, 4262
Irwin, J. O., 3087, 5546
Irwin, O. C., 2075, 2076, 3007, 4060
Ishihara, K., 814
Ishii, S., 2488
Ishikawa, K., 2750
Israel, R. H., 630
Israeli, N., 190, 1992, 2489, 2490, 3841, 4121, 4675
Israelite, J., 4701
Ito, C., 5083
Ityko, K., 2750
Ivanov, E. P., 3240
Ivanov, K. I., 3220
Ivy, A. C., 5646
Iwai, K., 2176
Iwatake, H., 2715
Izikowitz, S., 4575

Jaccard, P., 3241
Jack, E. G., 871
Jack, L. M., 4061
Jackson, A. S., 2207
Jackson, E., 3151
Jackson, J. A., 584
Jacobi, J., 3393
Jacobs, M. H., 5619
Jacobsen, C. F., 1331, 5161
Jacobsen, M. M., 1331
Jacobson, E., 477, 3200
Jacobson, P. B., 3566
Jaederholm, G. A., 4034
Jaen Sánchez, J., 1396
Jaensch, E. R., 67, 68, 478, 815, 816, 2419, 3620, 3642, 4988, 5590
Jahn, E., 248, 5378, 5379
Jahrreiss, W., 634
Jaiota, S. S., 153
Jaiota, S. W., 4227
Jameison, G. R., 635
James, H. E. O., 2716, 4280
James, H. W., 4062
James, W. T., 1306, 5706
Jamieson, G. R., 4676
Jancke, H., 697
Janet, P., 191
Janisevskij, A. B., 925
Jankowska, A., 6120
Janota, O., 2894, 4576
Janssen, O., 4228
Jardon, M., 484
Jasper, H. H., 1822, 1823, 3991
Jaspers, K., 1993
Jeep, H. A., 764
Jekels, L., 1366, 5805
Jelliffe, S. E., 3922, 5806
Jellinek, A., 3786
Jellnick, A., 5380
Jenkins, J. G., 2177, 2247, 3643, 5040
Jenkins, L. M., 2077
Jenkins, R. L., 2353, 4063, 5292, 5758
Jenness, A., 465, 466, 3335, 3464
Jenny, W. A., 3529
Jensen, F., 593
Jensen, K., 1552
Jensen, M. B., 2689, 4064
Jerrell, P. M., 5293
Jersild, A. T., 1543, 2078, 2572
Jespersen, O., 5940
Joaki, E., 2390, 2879, 3894, 4577, 5848
Jochelson, W., 3465
Johannes, T., 479
Johnson, A. A., 4673
Johnson, A. E., 4677
Johnson, B. J., 2573
Johnson, B. S., 2427
Johnson, C. A., 3746
Johnson, C. H., 46
Johnson, G. S., 4578
Johnson, H. M., 3336
Johnson, L., 4122
Johnson, W. M., 1416
Johnstone, G. G., 636
Joll, C. A., 206
Jones, C., 6066
Jones, D. C., 1347, 1417
Jones, E., 5219, 5220
Jones, E. S., 735
Jones, H. E., 902, 1864, 2079, 3310, 3597, 4177, 4183
Jones, J. R., 2659
Jones, L. W., 4184
Jones, R. L., 490
Jones, T., 5082
Jones, V., 1044, 1134, 6077
Jones, W. B., 6078
Jonnard, R., 5579
Joó, B., 4579
Joó, J., 5345
Jordan, A. M., 5759, 6079
Jordan, H. J., 5676
Jordan, J. S., 1639
Jordan, L., 5381
Jordan, R., 5737
Jordan, S. M., 4580
Jørgensen, C., 637
Josey, C. C., 817
Joslin, H. L., 1521
Judd, C. H., 4123
Judd, D. B., 812
Jung, C. G., 154, 926, 1877, 1937, 2354, 5807
Jung, H., 1079
Junod, H. A., 3992

Kaestner, E., 4989
Kafka, F., 4581
Kafka, V., 3923
Kagarov, E., 1468
Kahle, M., 3530
Kahn, E., 966, 5221
Kahn, J. L., 500
Kahn, P., 4583
Kahn, R., 4281
Kallen, H. M., 1135
Kalter, S., 3337
Kamaryt, S., 4065
Kamiat, A. H., 4932
Kandel, I. L., 3057
Kaneko, H., 2574, 2581, 3008
Kankeleit, O., 2420, 3338, 5222
Kanner, L., 967, 2740
Kano, H., 2954
Kant, O., 4678
Kantor, D. W., 1696
Kantor, J. R., 4933, 5591
Kaplan, E., 1180
Kaplun, D., 3175
Kappers, C. U. A., 1285, 1746
Kapri, M., 1681
Kardiner, A., 2421
Kardos, L., 4282
Karn, H. W., 1332
Karn, M. N., 5776
Karpeles, L. M., 3993
Karpf, F. B., 2491
Karpman, B., 5941
Karrer, O., 249
Karstens, E., 585
Karwoski, T., 2248
Kasanin, J., 322
Kaseff, L., 6080
Kataoka, H., 2215, 2492
Katz, D., 3242, 3620, 5707
Katz, H. L., 5165
Katz, L. N., 1323
Katz, R., 2575
Katzenstein, B., 2593, 5493, 5991, 5992
Katzoff, E. T., 505
Kauders, O., 638
Käufer, H., 3394
Kaufman, I., 4582
Kaufmann, M. R., 192
Kawaguzi, K., 2751
Kawashima, S., 3254
Kawin, E., 323
Kaye, G. W. C., 3644
Kayser, C., 3773
Keen, A. M., 436
Kehl, R., 3311
Keilhacker, M., 324, 6081
Kekcheev, K. S., 5993
Keichner, M., 1994
Keller, A. D., 491, 492, 1286, 3280
Keller, A. G., 1469
Keller, H., 115, 586, 4035, 4830, 4990
Kelley, T. L., 14
Kelley, V. H., 6069
Kellogg, L. A., 3787
Kellogg, W. N., 874, 3787, 5453
Kelsen, H., 5808
Kemp, E. L., 5515
Kempelen, A., 4762
Kennard, M. A., 5156
Kennedy, F., 639
Kennedy, M., 4831
Kennedy, W. M., 4799
Kennedy-Fraser, D., 355
Kenneth, J. H., 3645
Kenworthy, M. E., 1103
Kenyeres, E., 4763
Kerr, G. P., 2191
Kerr, M., 2717
Kestenbaum, A., 437
Key, C. B., 3595
Keys, N., 3924
Khrakovskaya, S. A., 1418
Khudorosheva, A. T., 2773
Kidd, A. M., 1045
Kido, M., 2493, 2690
Kiely, M., 2125
Kiensle, R., 1878
Kiesow, F., 4229, 4283
Kiessling, A., 1879
Kilby, M., 3567
Kimura, R., 968, 4500
Kimura, T., 4832
Kinberg, O., 1419, 2494
Kinder, J. S., 2626
King, C. D., 15
King, C. E., 875
Kingsbury, F. A., 2546, 4724
Kingsbury, S. M., 3483
Kinneman, J. A., 2627
Kinney, L. B., 1136, 2985, 6121
Kinugasa, S., 4792
Kirk, F. J., 4031
Kirk, S. A., 2413
Kirk, W., 3483
Kirkpatrick, C., 1046, 4679
Kirkpatrick, T. P. C., 698
Kirsch, J., 587
Kiser, C. V., 250
Kisselewsky, —, 1697
Kissin, M., 1307
Kitson, H. D., 356, 4934
Klages, L., 16, 155, 4935, 5223
Klatt, G., 640
Kleeman, R., 815
Klein, D. B., 785
Klein, M., 1367, 1880
Klein, R., 3395, 5484
Kleinschmidt, —, 5942
Kleitman, N., 1881, 3842, 3843, 5809
Kleiweg de Zwaan, J. P., 1420
Klemm, O., 36, 4936, 6082
Klestchov, S. V., 5708
Kline, E. J., 4124
Kline, L. W., 5943
Kline, R., 1328
Klineberg, O., 3015
Kling, C., 405, 5032
Klingbeil, W., 2495
Kloos, G., 3312
Klosowsky, B., 5117
Klotz, B., 5874
Klüver, H., 2816, 3285, 3620
Knigge, F., 3396
Knight, F. B., 2628
Knight, R., 1824
Knoll, W., 5810
Knowles, L., 193
Knowlton, D. C., 1587
Knox, L. B., 1603
Koch, C. C., 3646, 3647, 3648
Koch, H., 2319, 5382, 5994
Koch, H. L., 2576, 3747
Koch, M., 406
Koch, P., 325
Kochanovsky, T. Y., 1698
Kocka, Z., 1405
Kodera, Y., 5677
Koffka, K., 2718
Kogerer, H., 194
Kogo, S., 3152
Köhler, —, 3313, 3466
Köhler, O., 288, 1083, 1520, 5454
Köhler, W., 69, 4284
Kohn, L., 1323
Köhn, W., 5760
Kohnstamm, P., 3620
Kôichi, M., 2496, 2497
Kolb, L., 2498
Kolle, K., 641
Koller, L., 6119
Koloszvary, G., 116
Kolstad, A., 5383
Komarov, S. A., 3201
Komatsu, H., 2197, 3009
Kompanejetz, S., 818
Kondo, T., 2955
Konradi, G., 5995
Koo, S. P., 3058
Kopeloff, L. M., 507, 2271
Kopeloff, N., 507, 2271
Koreshige, M., 2216, 2499
Kormann, F., 1699, 4991
Korn, L. M., 5078
Korner, O., 5224
Körner, O., 819
Korngold, S., 2547, 5709
Kornhauser, A. W., 4725
Kornmüller, A. E., 433
Körösi, A., 1237
Kosaka, T., 3788
Kosawa, H., 5811, 5812, 5813
Koskoff, Y. D., 113, 3775
Kostyleff, N., 2272
Kotzovsky, D., 3925
Kouretas, D., 1882
Kowalski, W., 1258, 4902, 5996
Koyama, Y., 1047
Koyré, A., 3122
Krabbe, K., 4382
Kraemer, R., 5394
Krakora, S., 969
Kramer, F., 2178
Krämer, K., 251
Kranefeldt, W. M., 642, 1883
Krasno, M., 2706, 4973
Kraulis, W., 125

Krause, E., 4726
Krause, W., 126
Kravchinski, K., 4727
Kravkov, S. W., 438
Kravtchinsky, B. D., 2051, 2052
Krechevsky, I., 501, 894, 1838, 5162, 5738
Kreeser, G., 439, 1773
Kreiker, A., 3649
Kreindler, A., 4396
Krepe, G. M., 4383
Kretschmer, E., 3123
Kretz, A., 816
Kreuger, F., 5997
Kreusberg, P. J., 252
Kriaschew, —, 3748
Krieg, H., 289, 1084
Krieger, L. B. M., 2126
Krisch, H., 643
Krivy, M., 2080
Krogmann, W., 233, 4680
Krob, O., 3844
Kroll, F. W., 2256, 3192, 3807, 5658
Kroll, G., 6026
Kroll, S., 2422
Kronfeld, A., 588, 2423, 5295
Kropp, B., 3739
Krout, M. H., 2081, 3845
Krueger, E. T., 3483
Krueger, W. C. F., 3185, 4185
Krüger, G., 5998
Kruger, M. S., 5033
Krupka, E., 2082
Kubitschek, P. E., 2577
Kubo, S., 2719
Kubo, Y., 4301, 4764, 4833
Kuder, G. F., 4735
Kudrjawzew, N., 2983
Kügelgen, W., 290
Kühnel, G., 4384
Kulesár, F., 4528
Kulemeyer, W., 1588
Kulp, D. H., II, 6083
Künkel, F., 1995
Künkel, H., 1884
Kunz, H., 644, 4502
Kuo, Z. Y., 542, 895
Kupalov, P. G., 4385, 4386, 4387, 5118
Kupke, E., 3501
Kurani, H. A., 2127
Kürbitz, W., 1938
Kuré, K., 2750, 2751, 5083
Kuroda, R., 3124, 3286, 3287, 4230, 4285, 4443
Kurtz, J. I., 440, 3650, 3651, 3652, 3749
Kutzner, O., 1470
Kuypers, A., 5814
Kyneck, E., 291
Kyte, G. C., 2124, 2629

Labat, G., 5873
Labberton, M., 3531
La Brant, L. L., 3078
Lacan, J., 3370, 3397, 5268, 5868
Lacey, C. F., 508
Lacey, J. M., 3010
Lacroix, P., 1996
Lafon, G., 3713
Lafora, G. R., 1747, 3926
Laforgue, R., 4503
Lagache, —, 5869
Lagache, D., 2908, 3399
La Grange, A. J., 3750
Lahy, J. M., 2547, 4036, 4037, 4903
Laignel-Lavastine, —, 4583, 5296, 5874
Laird, D. A., 1939, 3846, 4728
Lake, G. B., 1997
Lalo, C., 1471
Lam, M., 1858
Lambercier, M. L., 4186
Lambert, E., 1279, 2785, 5722
Lambert, J. F., 475, 509
Lambeth, M., 3944
Lamboley, —, 3614
Lammermann, H., 6084
Lamparter, H., 3844
Lamparter, P., 3844
Lamson, H. D., 1998
Lanczos, A., 3202
Landa-Glaz, R. I., 3203
Landau, E., 3204
Landauer, K., 927
Landis, C., 55, 1774, 2273, 4504, 5011
Lane, H. A., 4125
Lang, A., 5384
Lang, H. B., 4584
Langdon, J. N., 510
Lange, M., 850
Lange, W., 1938
Langfeld, H. S., 2691
Langworthy, O. R., 6027
Lanier, L. H., 5944
Lány, E., 1048
Lapicque, L., 511, 512, 831, 2752, 4388, 5710
Lapicque, M., 4388, 5711
Lapitskii, D. A., 2785, 3205
Laplace, L. B., 1294, 1755
La Ravoire, J., 1775, 3847
Larivière, P., 2913, 3418, 4410
Larson, J. A., 928, 1721
Lasarev, V. G., 1421
Lashley, K. S., 1333, 3288
Laslett, H. R., 1538, 2151, 4722
Lassen, M. T., 564
Last, S. L., 1940
Latcham, R. E., 1472
Latmanisova, L. B., 1292
Lauderbach, J. C., 4187
Lauenstein, L., 2217
Lauer, A. R., 513, 4729, 4937, 5455
Laughlin, H. H., 901
Laugier, H., 357, 1589, 3742, 5700
Lauterbach, C. E., 3153, 4389
Lawrence, E. M., 4474
Lawton, G., 1368
Lawton, J. T., 330
Lazarsfeld, M., 4681
Lazarsfeld, P., 1473, 4881
Lazarsfeld, S., 5385
Leach, W., 898
Leahy, A. M., 1553, 2578, 3011
Leary, J. O., 1743
Leavitt, F. H., 5386
Lebedinski, A. V., 4390
Lebedinsky, M., 1859
Le Bon, G., 254
Le Bourdais, D. M., 2424
Lechler, A., 3467
Lechner, M., 326
Ledebur, J., 2778, 4423
Ledebur, J. F. v., 5678
Lederer, E. v., 5106
Ledgerwood, R., 467, 4038
Lee, J. M., 2161
Lee, R. C., 5101
Lee, V., 5387
Leeper, D. O., 480
Leeper, R., 480
Leese, C., 2785
Le Grand, Y., 1700, 3653
Legras, A. M., 2834, 3314, 5761
Legrün, A., 5316, 5945
Le Guillant, —, 2417
Le Guillant, L., 1414, 3369, 4541
Lehman, H. C., 756, 1567, 1590, 1801, 3568, 4094
Lehmann, G., 3243
Lehrer, L., 3468, 4126, 6028, 6085
Leibbrand, W., 589
Leibovici, R., 2902
Leibson, L. G., 2774
Leiri, F., 4286
Leister, F., 5620
Leites, R., 3733
Leitner, H., 2083
Lénard, G., 5485
Lénárt, E., 4826
Lenkner, H., 2050
Leonhard, K., 970
Leonhardt, C., 1667
Leopold, K. B., 4835
Leopold-Levy, —, 1936, 1941
Leriche, R., 3654
Leroy, A., 4585
Leroy, R., 2895, 2896, 2897
Lersmacher, G., 2548
Lessen, J., 2983
Lesser, A., 5946
Lester, O. P., 1369, 4315
Levenbach, M. G., 2549
Levenson, E., 3233
Levikowa, A. M., 5117
Levin, M., 1104, 4586
Levine, M., 5712
Levison, P., 4587
Levitan, M., 1939
Levy, D. M., 255, 2579, 3012, 6029
Levy, G., 3927
Levy, J., 2580, 3013, 5947
Levy-Suhl, M., 971, 5815
Levy-Valensi, —, 3398
Levy-Valensi, J., 1999
Lévy-Valensi, M., 2425
Lewald, J., 2426
Lewerenz, A. S., 2000
Lewin, B. D., 3848
Lewin, B. W., 156
Lewin, K., 4231
Lewis, A., 1860, 5762
Lewis, C., 4588
Lewis, F. H., 1726
Lewis, N. D. C., 645, 5875
Ley, A., 127
Ley, J., 4589, 5839
Lhermitte, J., 1942, 3714, 3715, 3927
Liang, B. T., 4316
Liao, W. K., 5948
Liaux, J., 4682
Liber, A., 3947
Liberson, W., 5713
Lichtenberger, J. P., 1049
Liebers, —, 5651
Liebig, G. F., 4391
Liefmann, E., 327, 3014, 5486
Liese, E., 2084
Lifshitz, S., 5621
Light, V. E., 3289
Likert, R., 1885
Lillie, R. S., 17, 3206, 3716
Lim, R. K. S., 3788
Lima, D., 1448
Limper, K., 2218
Lin, K. H., 543
Lincoln, E. A., 4165, 4188
Lindberg, A. A., 2692, 2779, 3244, 3265, 4392
Lindeman, E. C., 4590
Lindemann, E., 972
Lindemulder, F. G., 3207
Linden, W., 3532
Lindenfeld-Lachs, E., 2855
Linder, F. E., 5547
Linder, T., 2500
Lindley, S. B., 370, 407
Lindner, T., 5297
Lindquist, E. F., 764, 2155, 4189
Lindsay, W. B., 2630
Lindsley, D. B., 3258, 5084
Lindworsky, J., 18, 70, 157, 786, 1776, 5816
Line, W., 1180, 4127, 4128, 4190, 4232
Link, H. C., 3502
Link, M., 5763
Linker, G., 2501
Lintvareff, V. S., 5592
Lipmann, O., 2300, 2502, 2550, 2551, 2839, 3620, 3751, 3812, 4039, 4505, 4730, 5652
Lisser, H., 662, 3655
Lithauer, D. B., 3015
Litterer, O. F., 1137, 2503
Little, A. N., 2427
Little, C. C., 5755
Littlefield, R. E., 3656
Livingston, P. A., 1238
Lobingier, A. S., 4591
Loch, M., 328
Lockhead, J., 2631
Lockwood, J. E., 2776
Loczka, A., 4129
Lodge, O., 1370
Loewenberg, R. D., 2504
Loewenstein, R., 5817
Loewi, M., 846
Logre, B. J., 3399
Löhnberg, E., 5388
Lombroso, C., 1198
London, L. S., 3339
Long, J. A., 1701
Longstaff, H. P., 4836, 4837, 5447
Loo, Y. T., 493, 4347
Looft, C., 565
Looney, W. W., 86
Loosli-Usteri, M., 4191
Lopes, C., 3400
Lopes, E., 6122
Lopes, M. B., 71
Lorand, S., 3849, 3850
Lord, J. R., 4592
Lorente de Nó, R., 514, 2780, 5119
Lorenzini, G., 37
Lorenzoni, M., 3994
Lorge, I., 3186, 4393, 4394
Losanow, N., 4287
Loseki, N., 4233
Lottig, H., 905, 2320
Loucks, R. B., 2274
Louden, M. V., 4192
Lough, J. E., 4100
Loukas, C., 408
Louttit, C. M., 1199, 1474, 3538, 4130
Love, A. G., 1786, 2783
Lovejoy, O. R., 2085, 2505
Loveland, F., Jr., 1050
Lovell, H. T., 6086
Low, A. A., 5899
Lowell, H. T., 5653
Löwenstein, O., 3315, 4444
Lowie, R. H., 3949, 5950
Lowrey, L. G., 5876
Lowry, E. M., 4992
Löwy, S., 1886
Lu, T.-W., 2257, 2259, 2260
Lübbert, F., 2128
Lubimov, A. A., 2965, 3030, 3031
Lübke, K., 6087
Lubrich, W., 292
Luca, A. N., 4904
Luca, G., 1668
Lucena, J., 1422, 1640, 4605
Lucherini, T., 5877
Luckhardt, A. B., 3746
Luckiesh, M., 2219, 4288, 4993, 5622
Luckmidas, K. R., 699
Lüderitz, H., 101
Ludwig, W., 117
Lueck, W. R., 757, 2632
Lueth, H. C., 454
Luh, C. M., 3016
Luh, C. W., 72, 4316, 4445, 4683
Luisada, A., 3245
Lukács-Szász, I., 4066
Lukov, B. N., 5118
Lullies, H., 5676
Lumley, F. E., 2001
Lumley, F. H., 836, 837, 1669, 2986, 4684
Lund, E. E., 5163
Lund, F. H., 515, 4234, 4843
Lund, S. E. T., 2832, 5764
Lundeen, G. E., 1572, 2002
Lundholm, H., 5225
Lüneberg, T., 329
Lungren, F. C., 4306
Lunts, A., 3789
Luria, A. R., 158, 5951, 6030
Lurje, W., 4685
Lush, M., 330
Lutz, F. E., 4446
Lux, F., 1702
Luxenburger, H., 2321, 3401
Luzzatto, G. L., 1051
Lyman, R. L., 6088, 6089
Lyman, R. S., 5118
Lynch, C. A., 838
Lynd, H. M., 1138
Lynd, R. S., 1052
Lysen, A., 5389
Lythgoe, R. J., 2720

M., P., 1475
Ma, W. C., 2817
MacCrone, I. D., 2179, 2194
MacDonald, A., 1476
MacDonald, J. H., 2741
Macdonald, P. A., 441, 442, 443
MacDonald, W. T., 3288
MacDougall, E. D., 2506
Mace, C. A., 1670, 2633
MacEachran, J. M., 2898
Macewics, P., 5999
Macht, D. I., 929, 935, 1825
MacIver, R., 3483
Mackay, G., 1200
Mackintosh, H. K., 736
Maciagan, D. S., 896
Macleod, A. G., 1799
MacNaughton-Jones, H., 3154
Macoubrey, C., 3521
Macphail, A. H., 1521
Macrae, A., 3503

Madden, R., 1181, 1477, 2129
Madigan, L. F., 820
Madison, R. R., 5120
Madzsar, E., 5517
Maeder, L. M., 2428
Magenau, O., 973
Mager, A., 3484
Maggiore, S., 1423
Magnitskii, A. N., 3246, 3247
Maher, H. C., 1924
Mahler, W., 5714
Maidl, F., 5740
Maier, B., 3851
Maier, E., 56
Maier, N. R. F., 1334, 1826, 2856
Maiman, R. M., 3203
Mainwaring, J., 2744
Maiorov, F. P., 4447, 4448, 4467
Mair, E., 2956
Maiti, H. P., 38, 73
Maitland, J. G., 4395
Majewski, F., 4131
Makarow, I., 6002
Maker, P. T., 4166
Maki, I., 2941
Malamud, W., 646, 647
Malassez, J., 4994
Malin, J. E., 1591
Malis, G. J., 3569
Mallart, J., 1522, 6000
Maller, J. B., 2002, 2130, 2162, 2507, 2957, 3852, 4838
Maller, J. M., 5187
Mallet, R., 3928, 5298
Malzberg, B. 3929, 3930, 5892
Mancioli, M., 3017, 3018
Mandeville, S., 1777
Mandolini, H., 5390
Mandowsky, A., 2003
Maneval, H., 3790
Maney, C. A., 2634
Mann, I., 1827
Manning, W. H. O'N., 4040
Manoil, A., 720, 4731, 4995
Manrique, G., 4906
Manser, I. B., 648
Mansfeld, G., 3208, 3717
Manson, J. S., 5765
Mantegazza, P., 2004
Manuel, H. T., 1478, 4067
Manwiller, C. E., 2635
Manya, J., 1259
Manzoni, B., 195
Marañon, G., 5226
Marbe, K., 5456, 5715, 5818
Marble, A., 890
Marchand, L., 2919, 3402, 3931, 4593, 5878, 5879
Marcu, I., 3176, 5667
Marcucci, A., 3019
Marcus, E., 2005
Marcus, G., 1479, 5880, 5972
Marcus, H., 4506
Marcusse, M., 590
Marczell, M., 4068
Maresca, M., 1480
Marescalchi, A., 1554
Mareschal, —, 2425, 5299
Mareschal, P., 2918, 3698
Margineanu, N., 2275, 4235
Margulies, M., 974
Marinesco, —, 3932
Marinesco, G., 649, 4396
Marinesco, N., 1828
Markel, J. E., 1282
Markow, D., 5121
Marks, E. S., 4289
Marks, H. P., 890
Marple, C. H., 4686
Marquès, P., 5713
Marquis, D. P., 3020, 6036
Marryott, F. J., 2947
Marsh, C. J., 4882
Marsh, L. C., 2429, 5881
Marshall, R., 4687
Marshall, W. H., 4340, 4348, 5076
Martens, E. H., 4765, 4766, 4767
Martin, E. D., 930
Martin, H., 2086
Martin, H. E., 1778
Martin, L., 3340
Martin, L. C., 1201
Martin, M. F., 3021, 5164
Martin, P., 4534
Martinengo, V., 5726
Martinez, A., 4594
Martz, E. W., 2430
Marucci, A., 5647
Marui, K., 975
Masaki, M., 2220
Masaki, T., 3022
Mascheck, F., 3533
Maslow, A. H., 544, 1829
Mason, F. V., 3933
Masquin, —, 2425
Masquin, P., 2880, 2889, 4541, 5299, 5850, 5851
Massaut, C., 4595
Massey, M. E., 2716, 4280
Massion-Verniory, —, 4563
Masson-Oursel, P., 1202
Mast, S. O., 118, 3290
Masters, H. V., 2657
Masuda, K., 4768
Masure, R. H., 2301
Matejka, F., 3504
Mathews, C. O., 1139, 3570
Mathieu, J., 444, 1105
Matskevich, A. N., 1376
Matsumoto, H., 2508
Matthes, K., 1779, 5679
Matthews, M. A., 2431
Matthews, S. M., 3023
Mattson, M. L., 4769
Matskevitch, A. N., 1641
Maul, R., 2746
Mawson, C. A., 2276
Max, L. W., 409
May, J. V., 3615
May, M. A., 1887
Mayendorf, N. v., 976, 977
Mayer, F., 2857
Mayer, J., 5953
Mayer, M., 5122
Mayer, T., 1085
Mayer-Hillebrand, F., 3657, 3658
Mayerhofer, G., 293, 1371
Mayou, M. S., 5623
Mazzi, L., 3403
McCartney, J. L., 5954
McClendon, J. F., 100
McClure, W. E., 2087, 2509
McConnell, J. W., 196
McDermott, J. F., 3995
McDougall, W., 159, 3125, 3126, 5882
McDowell, R. J. S., 5680
McElwee, E. W., 378, 379, 1555, 1592, 3024, 4193, 4194
McFadden, F., 3659
McFarland, R. A., 3853
McGeoch, J. A., 481, 1671, 1888, 2277, 2745, 4397, 5123, 5716
McGilvray, E. B., 5524
McGinnis, W. C., 4132
McGovern, B. E., 516
McGraw, M. B., 3025, 3534, 4770
McIndoo, N. E., 2302
McKay, A. T., 5548
McKee, J. H., 2636
McKee, P., 4825
McKeown, E., 5532
McKerrow, J. C., 700
McKibben, P. S., 2818
McKinney, F., 591, 2303
McLaughlin, K. L., 4834
McLean, F. C., 4596
McMurry, R. N., 1086
McMurtrey, G. W., 1593
McNeill, H., 787
McNemar, Q., 530, 545, 2833
McRae, C. R., 6090
McRae, J., 330
McSwiney, B. A., 494, 4334, 5681
McTeer, F. D., 3229
McTeer, W., 862, 2278
Mead, M., 256, 737, 1053, 5955
Meano, C., 1054
Médakovitch, —, 2895
Medrow, W., 3594
Meenes, M., 4307
Meenta, I. G., 6031
Meggendorfer, F., 5391
Mehmel, H. F., 2249
Mehmke, R. L., 2053
Mehus, O. M., 2637
Meignant, P., 2054, 3752
Meil, W., 758
Meillet, A., 5392
Meister, O., 2131
Meister, R., 102
Melby, E. O., 3059
Melcher, R. T., 621
Melian, A., 1523
Melinand, C., 3341
Mellinger, B. E., 1556
Meltzer, H., 738, 3571
Mendenhall, G. S., 1557
Mendoza, R., 1239
Mendoza, S., 1055
Menger, C., 3505
Menninger, K. A., 4302
Menninger, W. C., 3404
Menninger-Lerchenthal, E., 1424
Meriam, J. L., 5518
Meriggi, P., 5393
Merriman, W., 2432
Merry, F. K., 1140, 4771, 4839, 5625
Merry, R. V., 5625
Merx, E., 2433
Metcalf, H. C., 4741
Metelmann, C., 257
Metfessel, M., 1672, 4236
Metzger, E., 4996
Metzger, W., 2221, 2721
Meunier, R., 2239
Meyer, A., 978
Meyer, B. B. M., 4840
Meyer, E., 258
Meyer, F., 650
Meyer, F. M., 1889
Meyer, M., 4303
Meyer, M. H., 4047
Meyers, C. S., 5520
Michael, J., 3469
Michaelson, I. C., 2222
Michel, K., 2304, 3791
Michel, R., 3405, 5394, 5395
Michotte, A., 4290
Middleton, W. C., 5227
Mieto, D., 3355
Mignault, P., 3370, 3398
Migliavacca, A., 1308
Mignot, R., 3934
Mihšilá, I., 4260
Mikulski, K., 6091
Mikuška, V., 4938
Miles, G. H., 2055
Miles, K. A., 3535
Miles, M. M., 99
Miles, W. R., 517, 518, 1780, 1890, 3098
Milholland, J., 4152
Miller, C. H., 817
Miller, D. B., 4841
Miller, D. F., 4842
Miller, D. W., 4133
Miller, E., 5041
Miller, F. R., 519
Miller, H. A., 3483
Miller, J. A., 4849
Miller, L. W., 5510
Miller, N., 1056
Miller, V. L., 6036
Millot, A., 2638
Mills, C. A., 2820, 5166
Miner, J. B., 3585, 4237, 5593
Miner, J. R., 259, 1057
Minkowski, E., 4597
Minne, A., 4571, 4634
Minnich, D. E., 3792
Minski, L., 618
Mira, E., 3660
Mirabella, E., 1943
Mira y Lopez, E., 1058
Mirk, M., 6001
Misbach, L. E., 876, 5512
Misch, W., 2434
Miséfari, E., 2987
Misumi, I., 4662
Mitchell, A. G., 4598
Mitchell, H. H., 2088
Mitchell, M. B., 1372, 2250, 3187, 3699, 5042
Mitchell, W., 5594
Mitolo, M., 1287, 1288
Mitra, P., 4688
Mitra, S. C., 4238
Mittelmann, B., 4599
Miya, K., 2574, 2581, 2722, 3008
Miyama, A., 2781
Mize, R. H., 2305
Mjöen, F., 2319
Mjöen, H., 5382
Moberg, L. E., 5300
Moede, W., 1524, 2132, 5396
Moers, M., 57
Moersch, F. P., 197
Mogendovich, M. R., 3209, 3248, 3260
Moguillansky, J., 4600
Mohr, A., 4843
Mohr, F., 1944
Mohr, G. J., 3916
Mokuno, K., 2223
Moldaver, J., 1781
Moldovan, M., 721, 739, 3129, 5228, 5437
Molinari, A., 5766
Molitor, H., 3343
Molnar, E., 5956
Moiukalo, L. P., 1249
Money-Kyrle, R., 5229
Monje, M., 4997
Monnier, M., 5741
Monroe, M. M., 3142
Monroe, R. E., 4844
Monroe, W. S., 4167, 4168
Montassut, M., 5883
Montesano, G., 5301
Montgomery, S. R., 215
Montmasson, J. M., 1727, 3700
Mooney, M., 1425
Moore, A. R., 3753
Moore, G., 2006
Moore, J. S., 5595
Moore, L. H., 701
Moore, M. U., 4772
Moore, R. E., 3661
Moore, R. M., 3661, 3662
Moore, T. V., 1616, 4998
Moos, J. C., 3957
Mora, J. M., 651
Moracci, E., 5682
Moragues, J., 4069
More, G. V. D., 1059
Moreau, M., 198, 3406
Morel, F., 1945
Morgan, I. L., 3935
Morgan, J. J. B., 652
Morgan, L. E., 401
Morgan, W., 2958
Morgenstern, —, 3528
Morgenstern, S., 3839
Morgenthaler, W., 3936, 3996
Morin, G., 1805
Moringa, S., 2224
Morison, A. G., 774
Morita, S., 821
Moriand, A., 653
Morris, C. W., 1203, 2693
Morrison, B. M., 3178
Morrison, H. C., 1141
Morrison, N., 1830
Morse, M., 4406
Morselli, E., 5397
Mort, P. R., 1594
Mosby, G. L., 4601
Moss, F. A., 2133
Moss, F. K., 2219, 4288, 4993, 5622
Mouchet, E., 58
Mourgue, R., 1946, 5884
Mowrer, E. R., 1060, 2510
Mowrer, O. H., 520, 1782, 2225
Moxon, C., 3937
Moyer, C., 2267
Muchow, M., 3620
Mudroch, R., 3536
Muenzinger, K. F., 2305, 3228
Muggia, A., 2007, 5487
Muhl, —, 5488
Mühlen, R. v. d., 5519
Mukerjee, R., 2008, 2959
Mukherjee, K. C., 3135, 4239
Muldo, F., 294
Müller, E., 103
Müller, F., 5302
Müller, G. E., 4999
Müller, H., 3938
Muller, H. J., 5767
Müller, H. K., 1703, 5000, 5001
Müller, H. v., 1673
Müller, I., 5230
Müller, L., 2899
Müller, L. R., 3718, 3719, 5231
Müller-Freienfels, R., 2009, 2511, 4939, 5489
Mullin, F. J., 5232, 5809
Multaretuli, —, 1373, 1891

Münch, J., 5002
Mundlak, M., 2694
Munn, N. L., 877, 1332, 1335, 5733, 5742
Murdock, G. P., 2960
Murgeanu, C., 4773
Murphy, G., 592, 593, 3616
Murphy, L. B., 1892
Murphy, M., 199
Murphy, P. G., 824, 5398
Murr, E., 3663
Murray, E., 2961, 3991
Murray, M. E., 331
Murray, M. M., 5717
Mursell, G. R., 260
Mursell, J. L., 2134
Musgrave, H., Jr., 4236
Müssler, M., 6032
Myers, A. F., 1142
Myers, C. S., 723, 3127, 4940
Myers, H. I., 5180
Myerson, A., 3939
Mygind, S., 5003

Nachmansohn, M., 4507, 5819
Nacht, S., 2355, 3940, 5885
Nageotte, Z., 39
Nagge, J. W., 2180, 4508
Nahm, E., 44
Nakanishi, M., 4304
Nash, J. B., 759, 760
Nass, G., 775, 1525, 3470
Nassri, K., 4193
Nathan, J. M., 3924
Nathan, M., 2010
Nathanson, Y. S., 1502
National Committee for Mental Hygiene, 2435
Natvig, H., 1704
Naves, A. E., 410, 546
Necchi, L., 4756
Neely, D. L., 1575
Neet, C. C., 707, 6077
Neipperg, E. v., 5004
Nelson, B. B., 416
Nelson, E., 1143
Nelson, M. J., 2639, 2640, 3060
Nelson, V. L., 5775
Nemliher, L. I., 1289
Nemoitin, B. O., 4845
Nemzek, C. L., 1128, 1642, 3099, 4070, 4196
Neoumikine, B., 2285
Neter, E., 2582
Neto, G., 5303
Nettelblad, A., 369
Neuberger, D., 1947
Neugarten, H., 931
Neugebauer, H., 332
Neuhaus, W., 445
Neumann, H., 979
Neumann, J., 2356
Neumann-Rahn, K., 980
Neurath, O., 2011
Neuschüler, I., 1336
Neustadt, R., 3941
Neustadt-Steinfeld, E., 3537, 4071
Neville, C. E., 2552
Newell, H. W., 740
Newens, L. F., 3076
Newhall, S. M., 40, 1783
Newland, T. E., 1481
Newman, H. H., 128, 1348, 5768
Newman, S. S., 2512
Neyman, J., 1168
Nice, L. B., 5165
Nice, M. M., 261, 3026
Niceforo, A., 2962
Nickel, A., 1204
Nicolesco, —, 3932
Nicolesco, M. J., 649
Niederhöffer, E. v., 1558, 3342
Nield, J. W., 1144
Nielsen, B., 5648
Niemer, G., 333
Nieto, D., 3942
Nihard, R., 2163
Nikolaeva, E. I., 2753
Nilsoe, K., 3061, 4846
Ninck, J., 2513
Nissen, A. J., 5769
Nissen, H. W., 5731
Noack, V., 702
Noble, R. A., 4602
Noble, T. D., 3407, 5886
Noer, R., 2706
Noffsinger, F. R., 3538
Nolen, M. E., 5123
Noll, A., 2819
Noll, V. H., 4197
Nolte, R., 6033
Nomura, G., 5233
Norman, R. M., 2891, 2892
Norris, A. C., 3027
Norsworthy, N., 4072
Northrup, W. C., 3805
Northup, J. D., 4274
Notestein, F. W., 567, 906
Notkin, J., 654, 2436, 2437, 2900
Nouel, S., 3742
Novais, S., 4906
Novak, E., 4603
Nowikoff, M., 3664
Nowotny, K., 2901
Nunberg, H., 1893, 2357
Nygaard, P. H., 1617
Nyssen, R., 4985, 5626, 5770, 5866
Nystrom, C. L., 5124
Nystrom, G. H., 2963, 3539, 4689

Oba, C., 2358
Obata, J., 821
Oberndorf, C. P., 2858
Oblath, O., 3665
Obonai, T., 2226, 2514, 4291, 5005
O'Brien-Moore, A., 5887
Och, J., 3540
Ochsenius, K., 4073
O'Connor, J., 4041
Ocshlier, M. M., 3666
Ödegaard, Ö., 655, 656, 657
Odell, C. W., 761, 1595, 2626, 3062
Odlic, R., 6034
Odier, C., 2359
Oertel, G. D., 46, 3667
Oeser, O. A., 2723, 2724
Ogden, C. K., 3997, 3998
Ogden, R. M., 2181, 2182, 3188
Ogle, C., 2820, 5166
Ogle, K. N., 424, 800, 801, 1215
Oglesby, C., 2988
Öhler, W., 5820
Ohm, J., 446, 447, 878, 1240, 1241, 1242, 2279, 5125
Oie, A., 1426
Ojemann, R. H., 3541, 4074
Ojima, S., 2227, 2515, 2574, 2581, 3008
Okabe, Y., 2360
Okamoto, S., 2361
Okinaka, S., 2751
Okuneva, I., 3249
Oldenbach, K., 2251
Older, F. E., 2541
Oldis, E., 1160
O'Leary, J., 1281, 1744, 1748, 5674
O'Leary, W. D., 4449
Oliver, R. A. C., 2012, 2668, 2964
Oliviera, —, 658
Olivo, O. M., 1349
Oller, A., 1526
Olmsted, J. M. D., 1772, 5070, 5683
Olsen, A., 2786
Olson, W. C., 394, 3542
Ombredane, A., 2902
Omwake, K. T., 3854
Oplinger, K. A., 4240
Oppler, W., 3408
Orgel, S. Z., 4075
Orgler, A., 907
Oriani, F., 2903
Orias, O., 5092
Ornsteen, A. M., 3409
Ortmann, O., 5627, 5958, 5959, 5960, 5961, 5962
Osawa, M., 3210
Osbon, W. O., 4240
Oseretsky, N. T., 2013
Oseretsky, N., 3250
O'Shea, H. E., 2089
Osipov, V. P., 4349
Osterberg, G., 5006
Osty, E., 2362
Osty, M., 2362
Oswald, A., 4241
Otero, S. M., 2695
Otto, H. J., 3063
Otto, R., 160, 262
Ottolenghi, S., 5963
Overman, J. R., 2641
Ovio, G., 2725
Owaki, G., 2176
Owings, C., 762

Pache, J., 5167
Page, M. L., 5888
Paget, R. A. S., 5399
Pailthorpe, G. W., 703, 704
Paine, A. L., 2438
Paine, V. L., 5743
Paiazzi, G., 2989
Palfrey, J. R., 4878
Pallister, H., 5821
Palmer, G., 646, 647
Palmer, H. D., 2438
P'an, S., 788
Paneton, P., 5007
Panse, F., 981
Pantalone, E., 1948
Papafava, N., 4941
Papierbuch, L., 5168
Pappenheim, M., 4570
Parella, J. R., 6092
Parffit, D. N., 4604
Parin, W. W., 5684
Park, G. E., 4292
Park, J. S., 832
Park, M. G., 2135
Park, R. S., 4292
Parker, G. H., 3754, 5743
Parker, H. T., 334
Parker, P. A., 2322
Parnes, J., 2642
Parpart, A., 5055
Parsley, M., 3471
Parsons, C. W., 1831
Parsons, J., 2228
Parten, M. B., 1061, 3543, 5490
Parviainen, S., 5720
Pascal, C., 1949
Pascal, J. I., 3668, 3669
Pastore, A., 4293, 4883, 5085
Paterson, A. S., 1350, 5889
Paterson, D. G., 1205, 2183, 2439, 3472, 3999, 4000, 4018, 4708, 5447, 5986, 5989
Paterson, J. A., 4584
Patey, H. C., 6093
Patrick, J. R., 1832, 4130
Patrizi, M. L., 1309, 3177, 4398, 5126
Patry, F. L., 932, 3572, 4134, 4135, 5234
Patten, E. F., 595, 4499
Patterson, M., 3259
Patton, E. K., 5043
Paulesco, N. C., 4399
Pauli, B., 104
Pauli, R., 5127, 5628, 5629
Paulian, D., 2904
Paulo, T., 2643
Pavia, J. L., 2229
Pavlov, I. P., 2440, 2905
Pavlova, V. I., 4400
Pawloff, P. P., 5008
Pawlow, I., 4450
Payne, V. F., 3064
Paz Anchorena, J. M., 1559
Peak, H., 521, 1784, 4401
Pear, T. H., 2014, 2717, 4690
Pearl, R., 129, 1861
Pearsall, W. H., 4242
Pearson, E. S., 1160, 1620, 5549
Pearson, G. H. J., 4774
Pearson, J. F. W., 3291
Pearson, K., 566, 1618, 1619, 1621, 5550, 5551
Peckham, R. M., 41, 42, 3670, 4294
Peinado Altable, J., 1596
Peirce, C. S., 4243
Pemberton, H. E., 4691
Penrose, L. S., 659, 908, 3410, 5188
Penzik, A. S., 1289
Perel, Y. A., 2965, 3028, 3029, 3030, 3031, 3065, 3066
Pérès, Z., 74
Perk, J., 4610
Perkins, F. T., 420, 2306, 4258, 4952, 5086
Perkins, H. F., 901, 5755
Perkins, R. E., 4198
Periman, V. T., 919
Pernambucano, U., 1427, 1428, 4605
Péron, M. N., 3943
Perrando, G. G., 5964
Perrin, F. A. C., 19
Perrin, P. G., 4136
Perrine, J. O., 4244
Perris, C., 1482
Perry, F. V., 763
Perwitzschy, R., 5304
Peserico, M., 1429
Pessin, J., 839
Peterman, M. G., 3411
Petermann, B., 20
Peters, C. C., 2516, 6117
Peters, H. N., 3288, 5716
Peters, R., 2230
Peters, W., 1374, 2090, 5630
Peterson, E. T., 764
Peterson, F., 3156
Peterson, G. M., 482, 547
Peterson, H. J., 1145, 1146
Peterson, I. E., 5986
Peterson, J., 4942
Peterson, J. C., 1145, 1146
Peterson, R. C., 3519
Petit, G., 5890
Petit, M. G., 3944, 3945
Petran, L. A., 1260, 5965
Petrazzani, P., 3412
Petrén, A., 982
Petrescu, C. I., 596
Petrov, F., 2754, 3221
Petrova, M. K., 4402, 4451
Peyser, N., 2644
Pezalla, —, 3946
Pézard, A., 1833
Pezold, H. v., 3855
Pfahler, G., 4943
Pfänder, A., 2240
Pfeifer, R. A., 5891
Pfeiffer, H. E., 2231
Pfennigsdorf, E., 200
Pfister, B., 597
Pfluck, A. v., 3671
Phalen, H. R., 5751
Phelps, W. M., 621
Phillippowitsch, S., 3251
Phillips, A., 380
Phillips, E. B., 3541
Phillips, G., 1682, 4329
Phillips, J. F. V., 2194
Phillips, 2136
Philpott, S. J. F., 4317
Piaget, J., 335, 741
Piaggio, H. T. H., 5552
Piccaluga, L., 860
Pichard, —, 3978
Pichard, H., 3909, 3947
Pick, E., 3343
Pickford, R. W., 5400
Piddington, R., 3128, 5822
Pierseccini, G., 5305
Pierce, P. R., 4847
Piéron, H., 1206, 1705, 1785, 2232, 3100, 3672, 3673, 4199
Pigors, P., 6035
Pike, F. H., 654
Pikler, J., 448, 822, 1706
Pilek, E., 472
Pillsbury, W. B., 2184
Pinard, J. W., 3101, 3102
Pincus, G., 5150
Pini, L. G., 3856
Pinsent, A., 5521
Pintner, R., 1375, 2669, 5522, 6094, 6123
Pinto, C., 5303
Pintus, G., 130
Pi Suner, A., 1749
Pi Sufier, J., 5401
Pitkin, W. B., 4732
Pitt-Rivers, G., 263
Pittard, E., 5189
Plant, J. S., 1106, 1483
Platonov, K. J., 1376
Plattner, F., 5685
Plattner, W., 4606
Plattner-Heberlein, F., 3413
Plaut, P., 3473, 3474, 4692, 4693
Plottke, P., 2363
Plöttner, O., 2056
Podernil, V. A., 2755
Poe, D. L., 4403
Poffenberger, A. T., 483, 4733, 5596, 5966
Poggi-Langostrevi, G., 5128

Pohl, G., 5458
Pohlisch, K., 933, 4607
Pohlman, A. G., 1243, 3674
Poindexter, F., 2645
Poll, C., 3414
Poll, E., 201
Pollak, F., 161
Polland, W., 3675
Pollock, H. M., 2906, 5892
Pollock, K. G., 449
Pollock, L. J., 3196, 4608
Polyakov, K. L., 3292
Pomerat, C. M., 548
Pond, M., 3506, 4734
Ponga, H., 5402
Ponthus, P., 1707, 1708
Ponzo, M., 1674
Poole, G. P., 4424
Pop, Z., 5893
Pope, R. V., 1597
Popek, K., 202
Popenoe, P., 131, 901, 3353, 3806
Popescu Teinsan, E., 4186
Popp, W., 358, 2364
Poppelreuter, W., 1105, 2646
Poppinga, O., 2233
Porak, R., 1750, 3755, 3756, 3897
Porc'her, Y. J. M., 3948
Porot, A., 2517
Port, K., 5044
Portenier, L. G., 5523
Porter, J. M., Jr., 1811
Porteus, S. D., 6124
Porto, L., 1430
Porz, R., 5020
Posse, F., 1062
Postma, H., 2583
Potter, G., 1377
Potter, H. W., 2907, 4609
Pötzl, O., 3343
Poulson, M. W., 5648
Powdermaker, H., 2966
Powell, W., 4110
Powers, F. F., 4137
Poynts, L., 3544
Pradines, M., 3137
Prager, F., 6024
Prahács, M., 4001
Pratt, C. C., 411, 3475
Pratt, J. B., 4245
Pratt, J. P., 2280
Prautzsch, K., 4138
Préobrajensky, B. S., 450
President's Research Committee on Social Trends, 2967
Pressey, L. C., 3103, 4848, 5967
Pressey, S. L., 1147, 3103, 3573, 5524, 5967
Preston, G. H., 132
Preston, K., 705
Price, H., 3344
Price, J. W., 4849
Price, M. P., 764
Prikhodioniy, E. A., 1484
Prikladovitsky, S. T., 2057
Prince, M., 162
Prince, W. F., 162
Principalli, S., 2782
Prinzhorn, H., 4944, 5306
Pritchard, E. A. B., 5718
Probst, J. B., 4042
Propper, N. S., 1290
Prosser, C. L., 118
Pruette, L., 4775
Prusenko, G., 1261
Puech, H. C., 3122
Puhl, E., 3642
Pulver, M., 2518
Purdy, D. M., 451, 2733, 2736
Pusey, W. A., 4614
Putnam, E. J. S., 2968
Putnoky, F., 283
Putnoky, P., 4721
Puusepp, L., 4610
Pyle, W. H., 105, 3757

Quastel, J. H., 4611
Quayle, M., 336

R., T., 2969
Rabaud, E., 1834, 1835
Rabinovich, J. S., 1950
Rabofsky, A., 2058
Racine, A., 2970
Rácz, E., 5235
Radclyffe, E. J. D., 5403
Radecka, H., 2584
Radecki, W., 1675, 4706
Rademaker, G. G. J., 2281, 3758, 3759, 5110
Radermacher, L., 2647
Radin, P., 706
Radó, S., 2365, 3345, 5823
Radosuska-Strzemecka, H., 4907
Radovici, A., 5667
Radulescu-Motru, C., 412, 707, 3129, 5525
Raffel, G., 871
Ragab, A. F., 572
Raglan, Lord, 2859
Ragno, A., 4612
Raiga, E., 3346
Raignier, A., 3293
Raitz von Frentz, E., 264
Rališ, A., 4076
Râmadier, J., 660
Ramírez, S., 4613
Rampling-Rose, W., 2838
Rand, G., 432, 807, 808, 1227, 3142, 3143, 4271, 4974, 5581
Raney, M. E., 507, 2271
Rank, O., 1107, 1485, 2648
Ranschburg, P., 661, 1310, 5491, 5526, 5719
Ranson, S. W., 489, 3211, 3252
Rapaport, S., 203
Rasmussen, G. L., 1742
Rasmussen, J. A., 5771
Rattner, H., 4614
Rattray, R. S., 2519
Rauch, M., 1951
Rauth, J. E., 1560, 3545
Raventos, J., 1749
Rayleigh, Lord, 4509
Razran, G. H. S., 5744
Reckless, W. C., 1486, 5404
Redalié, L., 3415
Redfield, R., 2015
Redmond, F. A., 2652
Reed, H. J., 840
Reed, L. J., 1786, 2783
Reeder, C. W., 4850
Rees, J. R., 4510
Regan, J. F., 3253
Reger, S. N., 5009
Reich, W., 2332
Reichardt, M., 5307
Reiche, A., 5308, 5894
Reichenberg, W., 4622
Reichert, W., 1894
Reifenrath, H., 3574
Reik, T., 1378, 5236
Reilly, W. A., 662
Reiner, M., 2366
Reininger, K., 2570
Reiter, P., 5309
Reitynbarg, D., 6002
Rejtö, A., 823
Rele, V. G., 3857
Remer, L. L., 3546
Remmers, H. H., 1039, 2636, 4322, 6095
Renqvist, Y., 5140, 5720
Renshaw, S., 413, 2367, 6036
Repond, A., 2016, 3949
Répond-Malévoz, A., 4511
Reps, A., 5405
"Research Officer," 3858, 3859
Restivo, P., 5310
Restorff, H. v., 4776
Reusser, J. L., 4777
Reuter, E. B., 3483, 4694
Revault d'Allonnes, G., 3158
Révész, G., 3620
Rexroad, C. N., 4246
Rey, A., 3760
Reymert, M. L., 2185, 2670, 6125
Reynolds, B. C., 265, 2520
Reynolds, S. R. M., 4603
Rheine, T. V., 4002
Ribeskog, B., 3701
Ricci, A., 2784
Rice, L. H., 5074
Rice, S. A., 5980
Rich, G. J., 4247
Richards, A., 21
Richards, A. I., 4003
Richards, G., 1148
Richards, I. A., 22
Richards, T. W., 4851
Richardson, H. M., 1561
Richardson, L. F., 5010
Richardson, M. W., 4735, 4852, 4858, 4884
Richmond, P., 4295
Richmond, W., 983
Richmond, W. V., 4077
Richter, C. P., 598, 3216, 3294, 4404, 5745
Richter-Altschäffer, H., 2661
Rickel, A., 2186
Rickett, H. W., 2649
Rickman, J., 2017
Riddle, E. E., 604
Rider, P. R., 1622
Ridges, A. H., 3612
Ridgeway, C. W., 1263
Riebesell, P., 370
Riegele, L., 3686
Riese, W., 1063
Riess, R. R., 3159
Rieti, E., 1431, 1952
Rijlant, P., 1760, 3720, 3793
Rikkl, A. V., 3212
Riley, C. F. C., 3269
Riley, H. A., 5895
Rinde, C. A., 3676
Rioch, D. M., 4350, 5054
Ripin, R., 2282
Ritchie, A. D., 1787
Ritter, W. E., 1676
Riviere, B. B., 3295
Riviere, J., 2860
Rivin, Y. G., 4736
Rizzo Borghese, C., 5135
Rizzolo, A., 2821, 3794
Roback, A. A., 1379, 2861, 3660, 5969
Roberda, W. M., 5597
Roberts, H. H., 5970
Roberts, J. E. H., 498
Roberts, K. E., 3547
Roberts, R. L., 5492
Robertson, D. M., 443
Robicsek, H., 4004
Robin, G., 4078, 4079, 4080
Robinette, G. E., 338
Robinson, E. S., 414, 106, 4005
Robinson, F. P., 824, 4006
Robinson, F. R., 106
Robinson, M. H. B., 5721
Robinson, T. W., 410, 546
Robinson, V. P., 4615
Robinson, W. J., 1575
Robson, J. M., 494
Rocard, Y., 3130
Rochlin, S., 2059
Rocholl, C., 4007
Rodewald, —, 133, 1953
Rodger, A., 5406
Rodgers, G. S., 4139
Rodiet, —, 2908
Rodrigo, M., 6003
Rodriguez Cabo, M., 2018
Roelofs, C. O., 458, 5025
Roemer, H., 663, 984, 2909, 5896
Roesle, E., 5190
Roger, H., 1954, 4616
Rogers, D. C., 3088
Rogers, F. T., 5011
Rogers, H. S., 2060
Rogers, J. F., 4695
Rogge, C., 5968
Rohden, F. v., 4008
Röheim, G., 163, 164
Rohracher, H., 107
Rojas, N., 1562
Romagna, M. A., 1432
Romahn, E., 1643
Römer, A., 165, 266
Ronce, R., 3347
Ronchi, —, 1709
Rondepierre, —, 4475
Rondepierre, J., 3369, 4577
Rony, H. R., 2910
Roos, J., 4405
Root, W. S., 87
Rorschach, H., 2671
Rósa, L., 5311
Rosca, A., 664
Rose, G., 75
Rose, M., 852, 5746
Rose, M. S., 4081
Rosen, H. R., 5597
Rosenberg, H., 2756
Rosenblatt, M., 985
Rosenblueth, A., 88, 2785, 4350, 4361, 5722
Rosengren, B., 5012
Rosenheck, C., 1955
Rosenow, C., 371, 2585
Rosenquist, C. M., 3483
Rosenstein, J. L., 1433
Rosenstein, L., 4617
Rosenstein, L. M., 986
Rosenthal, H., 2521
Rosenthal, J. S., 108
Rosenthal, V. G., 4452
Rosenzweig, S., 4945, 6037
Ross, A. S. C., 4696
Ross, E. L., 2786
Ross, J. W. H., 4504
Ross, N., 452
Ross, T. A., 599
Rössel, F., 4009
Rossi, G., 2696
Rossi, M. M., 5237
Rossi, P., 204
Rost, H., 2187
Rostislav, J., 4778
Rostohar, M., 3067, 3548, 4082, 4083
Rothbarth, O., 1063
Rouart, J., 3402, 5322
Rounds, G. H., 483
Rouvroy, C., 4548, 4549
Rovan, A., 295
Rowe, A. W., 2283
Rowe, E. C., 4084
Royer, E. B., 4169, 5553
Royo-Vilanova y Morales, R., 1527
Rubenovitch, P., 2896, 2897
Rubin, E., 23, 1677
Ruch, F. L., 1836, 2307, 5723
Ruch, G. M., 2628
Ruch, T. C., 1779, 5679
Ruckmick, C. A., 415, 1788, 2586
Ruddick, C. T., 2697
Rudeanu, —, 5097
Rudeánu, A., 1735, 3721, 3761, 5631
Rüdin, R., 987
Rudy, H., 789
Ruffin, H., 1291, 1396
Ruger, H. A., 5724
Ruggles, A. H., 1108
Rugh, C. E., 1380
Rügheimer, K., 2862
Ruiz, C. A., 4853
Rüken, H., 205
Ruland, L., 267
Rulon, P. J., 6096
Rumberger, E. K., 474
Rümke, H. C., 2368
Rundquist, E. A., 2439
Runnels, R. O., 2672
Rupp, H., 2061, 3507, 6004, 6005
Ruppert, H., 2091
Rushton, W. A. H., 1751, 1752, 4351, 5824
Rusinov, V. S., 5087
Russ, H., 4767
Rüssel, A., 5013
Russell, B., 1149
Russell, C., 1598
Russell, D. S., 613
Russell, D. W. B., 4085
Russell, E. S., 549, 5747
Russell, J. T., 522, 4852
Russell, P. M. G., 4476
Russell, W. L., 2911
Russetzki, J., 495
Rutherford, C. W., 2441
Ruyer, R., 1207
Ryan, G., 3575
Ryan, H. H., 4122
Rylander, G., 5312

Sabaněev, L., 2019
Sabatini, A., 1311, 3017, 3018
Sachs, B., 3861, 5238
Sachsenberg, E., 6006
Sacristán, J. M., 790, 1956, 3950
Saffir, M., 5541
Sager, O., 2756, 4396, 5153
Sageret, J., 3862
Sahuqué, A., 3348
Sailer, R. C., 4683
St. John, C. W., 1604, 2651, 3455
Saks, C. I., 4296
Sakuma, K., 2234, 2698

Salas, J., 1182, 5567
Salisbury, H. M., 584
Salkind, A. B., 2020
Saller, K., 5772
Sallume, X., 567, 906
Salmon, A., 3863, 3864
Salmon, M. R., 1687
Salter, Mrs. W. H., 166
Salzi, M., 3349
Samanta, M., 38
Samanta, M. N., 4248
Sanborn, H. C., 550
Sanches, G. I., 4200
Sander, F., 3549, 4010, 4318, 4779
Sander, W., 6097
Sanderrindtorff, E., 4780
Sanders, G., 5035
Sanders, J., 2834, 4477, 5191, 5773
Sanderson, H. E., 3032
Sándor, B., 76
Sands, I. J., 5313
Sandschejew, G., 1487
Sangren, P. V., 1599, 4868
San Martino del Pardo, F., 1600
Sano, F., 988, 4478
Sapir, E., 3416, 5407
Sapli, H., 4249
Sargant, W., 4618
Saric, D., 206
Sarkar, S. L., 5971
Sarma, R. N., 791, 792, 793, 934, 4250, 4251, 4512
Sarris, E. G., 2308, 3296
Sartori, P., 1064
Sarvis, B. C., 5129
Sassa, K., 3254
Sato, K., 4781
Saudek, R., 337, 1351, 2522, 5192
Saul, L. J., 4967, 5076, 5687
Saunders, E. B., 207
Sawyer, M. E. M., 3297
Sawyer, M. M., 1312
Sayler, R. H., 4508
Sayre, F. B., 1065, 1488
Sch., P., 3865
Schaaf, W. L., 1601
Schachter, M., 4782, 5314
Schächter, M., 6038
Schaefer, H., 1710, 3723, 3724, 5632
Schaffer, K., 989
Schairer, J. B., 1109
Schanck, R. L., 1489
Scharf, C., 600
Scharrer, E., 3298
Schaub, E. L., 5598
Schauer, R., 5239
Schaus, H. M., 4086
Scheerer, M., 4946, 5493
Scheidemann, N. V., 338, 5045, 5527
Scheler, M., 830
Scheminzky, Ferd., 3160
Scheminzky, Fried., 3160
Schepper, J. M. J., 4597
Scherer, H. J., 4619
Sherrington, C., 3740, 4408, 1769, 5665
Schertel, E., 167, 2369
Schiff, P., 5315, 5316
Schigut, E., 5459
Schilder, P., 208, 990, 3816, 4783, 5317
Schiff, E., 883
Schill, E., 661
Schiller, —, 5240
Schiller, B., 1066
Schiller, M., 1313
Schiller, P., 2726
Schiller, P. v., 296, 1715, 5014, 5015
Schilling, R., 1434
Schjelderup, H., 2523
Schjelderup, K., 2523
Schleier, L. M., 6098
Schliebe, G., 453
Schlossberg, H., 1208, 1314, 4947
Schlossberg, T., 43, 1312, 3297
Schlote, W., 77
Schlotte, D., 339
Schlotter, B., 3417
Schlutz, F. W., 4406
Schmalhausen, S. D., 601
Schmeeckle, M. M., 3235
Schmeing, K., 3550, 4784
Schmié, C. F., 4698
Schmidberger, G., 4854
Schmideberg, M., 5241
Schmidt, E., 794, 1067
Schmidt, F., 3702
Schmidt, H., 297, 879
Schmidt, R., 209
Schmidt, S., 5408
Schmidt, W., 2524
Schmidt-Lamberg, H., 2912, 2576
Schmiedeberg, M., 168
Schmitt, F. O., 795, 3722
Schmitt, O. H. A., 795
Schmits, B., 742
Schmits, K., 68
Schmitz, W., 3617, 3723, 3724
Schneck, M. R., 5566
Schneckenburger, H., 743, 1563
Schneider, J., 2587
Schneider, K., 991, 1315, 1895, 3725, 3951
Schneider, K. M., 4453
Schneider, M., 2537
Schneirla, T. C., 4454, 4455
Schnyder, P., 268
Schohaus, W., 359
Schokking, C. P., 2834
Schorn, M., 1528
Schott, A., 1316, 1317
Schott, E. L., 4620
Schottky, J., 1435, 5318, 5897
Schrag, A., 6099
Schramm, G., 5034, 5494
Schreiber, E. W., 6098
Schreider, E., 2554
Schrenck-Notzing, A. v., 1896, 3866
Schriever, H., 5002, 5130
Schrijver, J., 1490, 2525, 2526, 3476, 4699, 4700, 5409, 5410
Schröder, H., 880
Schroeder, A., 3677
Schroeder, H., 929, 935
Schubert, G., 3681, 5016, 5748
Schubert, H. J. P., 483, 1789
Schuch, H., 665
Schulsinger, J., 2370
Schulte, F., 4352
Schulte, R., 2553
chultz, G., 4621
Schultz, J., 2442
Schultz, H. J., 936, 992
Schultz, R. S., 4737
Schultz-Hencke, H., 602, 4513
Schultze, W., 6039
Schulz, — v., 5131
Schulz, B., 5319
Schulze-Jahde, K., 3952
Schumacher, W., 6040
Schumann, F., 44, 1244, 1711
Schüssler, H., 1656
Schuwerack, W. G., 744
Schwab, F., 5242
Schwankl, H. D., 705
Schwartz, L. A., 1068
Schwartz, R., 321
Schwartzbart, A., 853
Schwarz, E., 5528
Schwarz, G., 5725
Schwarz, O., 1381
Schwarz, R., 5320
Schweicher, J., 68
Schweinitz, K. de, 4087
Schweitzer, A., 5411
Schweizer-Stettler, C., 3577
Schwenker, H., 782
Schwidetzky, G., 551
Schwung, H., 360
Scoe, H. F., 3551
Scott, G. D., 3552
Scott, T. C., 416
Scouras, P., 1882
Scuri, D., 5017
Seagoe, M. V., 340, 5972
Searl, M. N., 2138
Sears, J. B., 1130
Sears, L., 708
Sears, R., 2415
Sears, R. R., 937, 1783
Seashore, C. E., 3477
Seashore, R. H., 1209, 5599
Seashore, S., 2284
Sechehaye, A., 5412
Seckel, H., 3762
Seckler, P., 797
Seelbach, H., 796, 2188
Seelert, H., 3953
Seelig, E., 3478, 3479, 5973
Seeman, E., 1351, 5192
Seemann, M., 269
Seewald, L. G., 4407
Segel, D., 2139
Segers, J. E., 1173
Segre, R., 5726
Seidlin, J., 2140
Seifert, K., 5046
Seitzer, A., 3678, 5774
Seligman, B. Z., 2971
Sellars, R. W., 1210
Sellheim, N., 603
Selling, L. S., 1897
Seltzam, K., 2699
Selz, O., 45, 298, 5243
Selzer, C. A., 2787
Semelaigne, R., 2443
Semernina, A. V., 3255
Senden, M. v., 1712
Senecal, M., 3480
Senise, —, 1318
Sepp, I. K., 1753
Seracký, F., 3350
Serebrennikov, P. T., 1790, 2051, 2052
Serin, —, 1990, 3389
Serog, M., 5825
Seward, G. H., 4855
Seydell, E. M., 2727
Sgarbi, E., 299
Shacter, H. S., 6041
Shaffer, G. W., 523
Shallit, R. 3553
Shannon, J. R., 1151, 1602
Sharp, E., 2585
Sharpe, E., 169
Sharpey-Shafer, E., 1791
Shartle, C. L., 300
Shastin, N. R., 5321
Shaxby, J. H., 2728, 4297
Shaxley, J. H., 3582
Shcherbakov, A. I., 3068
Sheard, N. M., 5176
Sheldon, D. R., 4785
Shen, N. C., 4445, 4456
Shendarkar, D. D., 78
Shepherd, J. W., 361
Sherif, M., 109
Sherman, M., 3481, 3595, 5898
Shiba, T., 2751, 5083
Shigeno, M., 3135
Shih, M. H., 1183, 2141
Shimberg, M. E., 4622, 4701
Shimojima, K., 4702
Shipley, W. C., 881, 4409
Shirley, N. M., 4088, 6042
Shohrin, V. A., 1792
Short, W. H., 2589
Shotwell, A. M., 2150
Showalter, D. F., 24, 5132
Shrubsall, F. C., 666
Shryock, J. K., 2928
Shu, H. C., 3578
Shubin, N., 3213
Shuey, A. M., 2309
Shuey, H., 3104
Shultz, I. T., 5568
Shumaker, A., 2120
Shuttleworth, F. K., 2390
Siceloff, M. M., 5413
Siebert, K., 2371
Siegmund, H., 1898
Sievers, C. H., 2538
Signoret, L., 3579
Silberer, P., 1529
Simkin, N. V., 2062
Simmat, R., 6007
Simmel, E., 3826
Simon, A., 3033
Simon, R., 5315, 5316
Simon, T., 2913, 3418, 4201, 4410, 5322
Simonides, B., 341
Simpson, R. M., 1491, 4011, 4703
Sims, V. M., 1603, 4856, 6100
Sinclair, J. H., 5047
Singer, A. E., 3460
Singer, H. D., 3899
Singer, J., 4298
Singleton, A. O., Jr., 3662
Sirota, M., 2983
Sisson, E. O., 6101
Siusin, I. K., 882
Sivadon, P., 4630
Sivian, L. J., 5018
Sjögren, H. W., 5244
Sjögren, T., 3419
Skaggs, E. B., 484, 4411
Skaggs, I. S., 484
Skalet, M., 4202
Skawran, P., 1530, 2189, 4012, 4203
Skeels, H. M., 1564
Skiba, M., 5019
Skilling, H., 5414
Skinner, B. F., 552, 553, 1245, 1319, 4412
Skinner, C. E., 5133
Skinner, R. S., 4100
Skipin, G. V., 4413
Skobeltzine, V., 2822
Skorepa, M., 2092
Skorpil, R., 4013
Skovoroda-Zachinyaev, O. I., 5088
Slabihoudek, K., 3867
Slade, W. G., 938
Slater, L. B., 417
Sloan, L. L., 3143
Slutsky, A., 170
Smeltzer, C. H., 3089, 3564, 4140
Smiley, A. O., 4319
Smith, E. A., 513
Smith, G. E., 3161
Smith, G. R., 4204
Smith, H. N., 2444
Smith, J. J., 2972
Smith, J. M., 3256
Smith, K. R., 4744
Smith, M., 1899, 2372, 2673, 4014, 4786, 4787
Smith, M. E., 1492
Smith, M. S., 5527
Smith, O. C., 1279
Smith, R. B., 4514
Smith, W. F., 3034, 3162
Smoke, K. L., 5654
Smuts, J. C., 2194
Snedden, D., 5323
Snell, H. K., 3990
Snodgrass, J. M., 1321, 3764
Snow, R., 897
Snow, W. B., 3679
Snyakin, P. G., 3247
Sobel, S. P., 3163
Sokolnicka, E., 2373
Solbrig, —, 3868
Sollier, P., 1644
Solomon, M., 1069
Sommer, F., 270
Sommer, R., 993, 3954
Sommerfelt, A., 5415
Somogyi, I., 5324
Sontag, L. W., 4948, 5775
Sorenson, H., 3596
Sorge-Boehmke, E., 5416
Sorokin, P. A., 3483, 5974
Soresby, A., 2235
Sosset, M., 210, 5655, 5900
Spadolini, N., 171
Spaier, A., 3122
Spalding, A. W., 2591, 3035
Spanjaard, L., 2527, 2528, 4704
Spearman, C., 1623, 1900, 5554, 6126
Speer, E., 211
Speidel, C. C., 5688
Spence, K. W., 554
Spence, R. B., 2142
Spence, W., 5035
Spengler, E., 3763
Spengler, J. J., 568
Sperber, M., 1436
Speroni, C. F., 4573
Spiegel, E. A., 667, 3214
Spielrein, J., 6008
Spielrein, N., 4738
Spiller, G., 1352
Spiro, K., 4515
Spörri, H., 3728
Spotti, L., 5417, 5493
Spragg, S. D. S., 4457
Spranger, E., 2093
Springthorpe, G., 314
Spurrel, W. R., 5681
Squires, P. C., 496
Ssucharewa, G., 3420
Stagner, R., 381, 829, 1382, 2739, 3281, 3703, 3869, 4857
Stähelin, J. E., 668

Stalnaker, J. M., 604, 2630, 4141, 4852, 4858, 4884, 6102, 6103, 6104, 6105
Stanescu, J., 2904
Stanger, F. A., 4623
Stanley, D., 2021
Stanley, L. L., 1678
Stanotti, C., 212
Stanton, H. M., 5418, 5975
Staples, R., 1110, 2094
Starr, H. E., 1211
Stavsky, W. H., 535, 537
Steblow, E. M., 3421
Steck, H., 4624
Steen, R. R., 5901
Stefanelli, A., 5169
Steggerda, M., 2022
Steilberg, H., 6106
Stein, L., 213, 2973
Steinbach, E., 3249
Steinberg, W., 709, 1222
Steiner, G., 5325
Steinhausen, W., 3164, 3680
Steinitz, K., 3422
Steinitzer, H., 1493
Steinmetz, H. L., 4205
Stejskal, C., 2095
Stekel, W., 1383
Stengel, E., 214
Stephen, K., 5245
Stephens, J. M., 1320, 5048
Stephenson, W. M., 2914, 5561
Sterba, R., 1901, 3870
Stern, B. J., 2023
Stern, E., 3618
Stern, F., 2445
Stern, G., 883
Stern, H., 1494
Stern, K., 2592, 4142
Stern, W., 271, 2310, 2593, 4739
Sternberg, H., 825
Sternberg, K., 5600
Sternberg, O., 2329
Sternman, S. P., 1493
Sterzinger, O., 1085
Stetson, R. H., 3259
Stetter, H., 3299
Stevens, G. C., 342
Stevens, H. C., 1321, 3764
Stevenson, G. H., 215
Stevenson, G. S., 216, 1111, 2915, 6093
Stevick, P. R., 605
Stiefler, G., 2446
Stier, T. J. B., 1337
Stiles, W., 898
Stiles, W. S., 2729
Stockdale, L. G., 556
Stocks, P., 5776
Stockton, F. T., 1087
Stoddard, G. D., 2143, 2594
Stogdill, R. M., 4089
Stojanowski, K., 1496
Stoke, S. M., 1590, 4206
Stoker, D., 6076
Stokes, A. P., 994
Stokowski, L., 1070
Stolte, K., 5727
Stoltenhoff, H., 2374
Stolz, K. R., 710
Stone, C. P., 530, 545, 1338, 2375, 5732
Stone, H. M., 5902
Stone, L. S., 5170
Stone, S., 5903
Storch, A., 79, 4625
Storfer, A. J., 1384, 1728
Störring, G., 711, 995, 1262
Stouffer, S. A., 1618, 5976
Stover, E. M., 856
Stowell, E. Z., 4949
Strang, R., 765, 1605, 3508
Stransky, E., 854, 4570, 5977
Strasser, A., 3343
Strasser, C., 996, 4626, 5978
Strasser, V., 2252
Stratton, C., 2652
Straub, W., 2653
Strauss, A., 5904
Strecker, E. A., 997, 4627
Strecker, H., 5905
Streit, H., 2576
Strömme, J., 1957
Strom-Olsen, R., 669
Strong, E. K., 4207, 5461
Stroop, J. R., 4170
Stroud, J. B., 485, 884, 1263, 2746
Strughold, H., 5020
Strzemboss, T., 4313
Stscheglova, L., 3249
Stuchlik, J., 3351
Studebaker, J. W., 2628
Studencki, S., 2530, 4908, 5462
"Student," 3316
Studnitz, G. v., 3795, 4299
Stuit, D. B., 4168
Stumpf, N. F., 5529
Stumpfl, F., 5184
Stutterheim, N. A., 5021
Suils, A., 5326
Sukamoto, S., 4353
Sumner, F. C., 4705
Susmann-Galant, J., 1958
Susukida, T., 2190
Sutherland, E. H., 1071
Suttie, I. D., 606, 1902, 3955, 4015
Suttie, J. I., 606, 1902
Sutton, D. C., 434
Suzuki, E., 2531
Suzuki, S., 2730
Svendsen, M., 3417
Svenarud, M., 4016
Swann, H. G., 4252
Swanson, C. A., 841, 4628
Swartz, B. K., 5049
Sweerts, J., 3427
Swenson, H. A., 1246
Swift, A. L., 3482
Swineford, F., 6116
Switzer, St. C. A., 4499
Sydow, E. v., 272
Sylvester, M. L., 1565
Symmes, E. F., 4788
Symonds, C. P., 670
Symonds, P. M., 2161, 4143, 4320
Sze, J. F., 2144
Székely, L., 899, 1713
Széky, A., 3327
Szelőczey, J., 5702
Szilagyi, D., 5246
Szirmay Pulszky, H., 5601
Szondi, L., 4789
Szücs, G., 5328
Szuman, S., 1566

Taba, H., 2654
Tabori, J., 3871
Tachibana, K., 2788
Taft, D. R., 2974
Taft, J., 1385, 2376, 3580, 6043
Taft, K. B., 3995
Tait, W. D., 5329
Takano, K., 2532, 5633
Takata, Y., 909
Takemasa, T., 4990
Talbert, E. L., 5979
Talbot, J. H., 5697
Tamura, T., 2823
Tanaka, H., 2377
T'ang, Y., 119
Tannenbaum, A., 3712
Tanturri, V., 885
Taquet, —, 4475
Targonski, H., 5656
Targowin, R., 2863
Tate, E. F., 46
Tauber, S., 2864
Taussig, L., 607
Tavares, L., 4321, 4706
Taylor, A. H., 2191
Taylor, A. K., 3165
Taylor, C. D., 455
Taylor, E. J., 2916
Taylor, H. C., 4414
Taylor, J., 671
Taylor, N. W., 5022, 5023
Taylor, W. S., 2024, 5134
Tead, O., 2063, 4516, 4740, 4741
Teagarden, F. M., 3765
Teagarden, L., 3581
Telford, C. W., 712, 886, 5728
Telgher, A., 4017
Tellier, M., 4458, 4459, 5171
Temkine, W., 5634
Ten Cate, J., 5089, 5749
Ten Hoor, M., 2192
Terao, A., 5172
Terasawa, I., 2176
Terhune, W. B., 1072
Tescher, G. L., 1678
Tesmer, H., 5419
Teyrovsky, V., 2311
Tharp, B. B., 6107
Thiel, C., 456
Thiele, R., 5330
Thienpont, R., 5770, 5866
Thisted, M. N., 4322
Thom, D. A., 1112, 3036, 3872, 4629
Thomas, C., 1497
Thomas, C. D., 4517
Thomas, C. S., 3582
Thomas, D. S., 2025
Thomas, J. E., 2655
Thomas, J. M., 3423
Thompson, I. M., 3215
Thompson, J. H., 5721
Thompson, N., 5728
Thompson, W. H., 3069
Thompson, W. O., 2917
Thomson, E., 826
Thomson, E. I. M., 2145
Thomson, G. H., 608, 3090, 5569
Thomson, H., 745
Thorn, G. W., 2413, 4376
Thorndike, E. L., 1793, 1794, 3189, 4323, 4394, 5050
Thorne, F. C., 4950, 5024
Thouless, R. H., 2731, 3166, 4208
Thrasher, F. M., 713, 5420
Thuillier, R., 2879, 3894
Thurber, C. H., 3070
Thurnwald, R., 2975, 3873
Thurston, F. M., 1498
Thurstone, L. L., 827, 1499, 3091, 4171, 4852, 5541, 5555
Thurzo, E. v., 1437
Tibbetts, N. L., 3519
Tiegs, O. W., 5750
Tiitso, M., 3766
Tilney, F., 217
Tilton, J. W., 1587
Timme, A. R., 4790
Timmer, A. P., 5421
Tinel, J., 3906
Tinker, M. A., 418, 455, 705, 841, 3472, 3999, 4000, 4018, 4253, 4707, 4708, 4859, 4860, 5422
Tinkle, W. J., 3167
Tinklepaugh, O. L., 1339
Tissi, S., 5423
Titeca, J., 4589, 5839
Todd, T. W., 5496
Tokay, L., 5331
Tolman, E. C., 419, 1837, 1838, 4254, 4415, 4416, 5602
Tolman, R. S., 5047
Tomlinson, T. P., 3105
Tonkikh, A., 2757
Toops, H. A., 1088, 4144, 4172, 5553
Torgerson, T. L., 4145
Torrey, T. W., 5635
Toulouse, —, 4630
Toulouse, E., 998, 2285, 2447, 2918, 2919, 3956, 5332, 5333
Tournay, A., 1903
Tower, L. F., 672
Tower, S. S., 3216
Townsend, M. E., 2146, 4861, 5530
Trabue, M. R., 2064, 3989
Tracy, E. A., 3424
Traill, P. M., 4970
Tramer, —, 673
Tramer, M., 218, 273, 2448, 2449, 5497, 5907
Tramm, K. A., 1531, 2026
Travis, J. H., 5908
Travis, L. E., 2027, 3258, 3259
Travis, R. C., 1212
Traxler, A. E., 766
Treadgold, H. A., 4417
Treadway, W. L., 2378, 3425
Trelles, J. O., 2897
Tremmel, E., 1904
Triche, A., 5618
Trillot, —, 2869, 5835
Trolli, C., 4146
Trollo, E. B., 4631
Troina, F., 6009
Troisier, J., 4019
Trossarelli, A., 219
Trout, D. M., 1073
Trowbridge, M. H., 1264
Trubetzkoy, N., 5424
Truche, —, 5878, 5879
Trueblood, C. K., 1340
Truelle, V., 3426
Trüol, H., 457
Tryon, C., 3597, 5051
Tryon, R. C., 382, 1169
Tsai, C., 543
Tsang, Y. H., 119
Tschermak, A., 3217, 3681
Tsuiji, R., 2824, 5685
Tsuiki, Y., 2789
Tsuru, S., 4324
Tucker, W. S., 3168
Tulchin, S. H., 4909
Tulin, L. A., 1500
Tullio, P., 2732, 4862, 5135
Tumarkin, A., 274
Tuminti, C., 999
Tumlirz, O., 343, 3071, 4791
Turbiglio, F., 4147
Turck, F. B., 2193
Türck, H., 5247
Türkel, S., 1501, 4709
Turnau, H., 4255
Turner, W. D., 2733
Turney, A. H., 3598, 5570
Tusques, J., 2398, 3374, 3901, 3920, 3973, 4543
Tutkievitsch, L., 2983
Twitmyer, E. B., 1502
Tyrrell, D., 6010

Uchida, Y., 4792
Ueberhorst, A., 5425
Uexküll, J. v., 2700
Ufland, I. M., 1292, 4354, 4418
Ufland, T. M., 1795
Uhrbrock, R. S., 1213, 1386, 5463
Uhl, W. L., 4137
Ukhtomski, A. A., 4419
Ukrainczyk, F., 4632
Ulin, C., 2096
Ullmann, E. V., 1000
Ullrich-Hof, J., 2147
Ullyott, P., 4242
Ulp, C. M., 2286
Ulrici, H., 3957
Umedzu, H., 2976
Underhill, C. R., 5751
Unger, H., 2533
U. S. National Commission on Law Observance and Enforcement, 2028
Unzicker, C. E., 2656
Updegraff, R., 2164, 3554, 4793, 6044, 6045
Upshall, C. C., 2657
Upton, M. F., 507, 557
Urban, F. M., 486, 3169
Urbantschitsch, R., 3874
Urbányi, J., 6011
Urechia, C. I., 5334
Urinson, A., 4421
Ushenko, A., 2977
Usher, C. H., 5777
Ushijima, Y., 2534
Ushizima, Y., 4794
Utitz, E., 1503
Uttl, K., 1405, 4553

Valenciano, L., 5335
Valentine, C. W., 767
Valentine, W. L., 25
Valentiner, —, 3309
Valentiner, T., 722, 5603, 6012, 6108
Valeri, N., 1606
Van Acker, C., 4518
Van Bogaert, L., 3427, 4571, 5689
Van Buskirk, W. L., 3693
Vance, B. B., 3938
Van den Branden, J., 5136
Van der Bij, T. S., 2535
Van der Horst, L., 5636
Van der Leeuw, G., 5426
Van der Veldt, F., 5137
Van der Waals, H. G., 458, 5025
Van de Stadt, I., 374
Van de Wall, W., 2450
Van de Walle, E., 26
Van Dyk, J. A., 3300
Van Essen, J., 5636
Van Gehuchten, P., 674
Van Gennep, A., 1796
Van Ginneken, J., 5427
Vankowska, H., 1438

Van Liere, E. J., 1297, 1298
Vannas, M., 1247
Van Ormer, E. B., 842, 5657
Van Wagenen, G., 5090
Váradi, P., 4209
Varé, P., 1797, 2042
[Various], 46, 362, 797, 1439, 1839, 2194, 2734, 3072, 3619, 4256, 4742
Varner, W. B., 2293
Varon, E. J., 2461
Vasilev, L. L., 3218, 3219, 3220, 3221, 3260
Vasileva, E. I., 3205
Vásquez, J. B., 4633
Vásquez Zamora, R., 5428
Veit, O., 4020
Velasco, C. V., 5138
Veletskii, V. F., 5139
Velikovsky, I., 3352
Velinsky, S., 4148
Vendryes, J., 5429
Veo, L., 322
Verax, G., 1798
Verlaine, L., 1840, 3122, 3301, 3302, 4460, 4461, 4462, 4463, 4464, 4465, 4466, 5173, 5174
Verman, L. C., 2701
Vermes, E., 1001
Vermeylen, G., 675, 4634
Vernon, H. M., 301
Vernon, M. D., 2735
Vernon, P. E., 2379, 3730, 6127
Verrier, M. L., 1834, 1835, 1841, 3682
Verrijp, C., 4984
Ver Steeg, K., 2148
Vertes, J. O., 4325
Vértes, O. J., 5498
Vervaeck, L., 569, 4635, 5336
Verveer, E. M., 2241
Verzar, F., 3261
Vessie, P. R., 5337
Vetter, A., 1002
Vetter, G. B., 1905
Vevle, M. R., 4863
Viaud, G., 1842
Vidler, A. R., 275
Vidoni, G., 3510
Vidor, M., 2029
Vié, J., 3428, 3959
Vierkandt, A., 2978
Villamil, J., 5338
Villey-Desmeserets, —, 2871
Villiger, E., 89, 3726
Villinger, W., 2536
Vincent, M. J., 2030
Vinogradov, M., 4743
Vinogradov, N. V., 4355, 4420
Vinski-Hollinger, M., 3037
Viteles, M. S., 4744
Vladimirov, G., 4421
Vodnarik, O., 4090
Vogel, P., 3170, 3171, 4422
Vogelsang, K., 1940
Vogt, W., 3073
Voigt, E., 5729
Volborth, G. V., 3262
Volfovskiy, O. T., 1411
Völgyesi, F., 5248
Volkelt, H., 3131
Volkmann, J., 459
Volkmann, K., 4710
Volobner, P. J., 2595
Volochov, A., 4341
Volovik, A. B., 3555
Vondráček, V., 4519
Vorchheimer, O., 2451
Vormittag, S., 6046
Vorobyov, A. M., 1322, 2790, 2791, 3263, 3264, 3265
Vorwahl, H., 27, 276, 609, 3796, 4711
Voss, T., 2031
Vowinkel, E., 1074
Vozerskaya-Nikolaeva, N. A., 3266
Vruwink, J., 3353
Vullien, R., 1504
Vurpas, —, 3960
Vurpas, C., 5339
Vydra, J., 4091
Vyrgikovski, I. N., 4467

Wachholder, K., 497, 2258, 3727, 4423
Wachtel, J., 1265
Wachter, W. L., 901
Wada, Y., 2236
Wagenaar, J. H., 2792
Wagner, G., 2537
Wagner, M., 5340
Wagner, M. A., 6047
Wagner, M. E., 1607
Wagner-Manslau, W., 1353
Wagoner, L. C., 4092
Wahlquist, J. T., 4864
Waite, T. E., 2389
Waits, J. V., 4910
Wälder, R., 5827
Walker, H. M., 2662
Walker, J. F., 4149
Walker, R. Y., 5430
Wall, J. H., 635, 4676
Wallace, R. F., 4948
Wallenrod, R., 2149
Waller, H., 6048
Waller, J. F., 3074
Wallin, J. E. W., 3038
Wallon, H., 2097, 3429, 4795
Walsh, W. S., 3354
Walshe, F. M. R., 671
Walter, A. A., 834
Walter, W. G., 5730
Walters, J. E., 1152
Walters, M., 1862
Walthard, K., 3728
Walthard, K. M., 460, 3267
Walther, A., 714
Walther, L., 676
Walton, E., 3178
Walton, W. E., 4468, 5175
Wan, S., 543, 3797
Wander, A., 5484
Wang, C. K. A., 610, 1184
Wang, G. H., 2259, 2260, 3132, 3303, 3690
Wang, H. N., 4865
Wang, P. C., 3729
Wang, S., 28
Wang, T. Y., 3729
Wangel, R., 5140
Warden, C., 5052
Warden, C. J., 558, 1843
Waring, E. B., 3556
Warner, C. G., 301
Warner, G. L., 1003
Warner, L. H., 559, 1844, 1845
Warner, P. C., 3075
Warrain, F., 2195
Warren, E. R., 2312
Warren, H. C., 2865
Washburn, M. F., 277, 5637
Washburn, R. W., 1679
Washburne, C., 3519
Washburne, J. N., 344
Wasowski, T., 887
Watanabe, M., 4866
Waters, P. S., 2452
Waters, R. H., 3511, 4424
Waterston, D., 5638
Watkins, D., 2021
Watkins, G. P., 5556
Watkins, H. W., 2453
Watson, A. E., 1075
Watson, D. L., 5604
Watson, G., 1153, 2032, 4150, 5828, 6109
Watson, G. H., 5531
Watts, R., 1505
Webb, L. W., 2150
Webb, W. W., 4425
Weber, A., 392, 460, 806
Weber, A. O., 3683
Weber, C. O., 1714, 3179, 4035
Weber, H., 68, 677
Weber, H. C., 5026
Wechsler, D., 1739, 4210
Wehnert, W., 2098
Weichbrodt, M., 715
Weickert, I., 4796
Weidemann, C. C., 3076
Weigand, G. E., 3336
Weil, F., 1440
Weimar, P., 2658
Weimer, B. R., 3304
Weinberg, D., 357, 1589, 1906
Weinhandl, F., 1907
Weinreich, R., 5341
Weiss, A. P., 2033
Weiss, E., 2866, 5829
Weiss, L. A., 3599
Weiss, P., 3222, 3261
Weiss, V., 5249
Weissenberg, E., 1284
Weisser, E., 1506
Weisz, S., 3223
Weiszäcker, A., 939
Weitershagen, P., 4021
Weitsch, I., 5466
Weiz, A., 4151
Welch, H. J., 7237
Welles, H. H., 1908
Wellman, B. L., 2165, 2674, 3106
Wells, C. D., 2034
Wells, F. L., 611, 5342
Wells, G. P., 4469
Wells, H. G., 4257
Wendt, G. R., 4745
Wengraf, F., 1959
Wenzl, A., 363, 5605
Werner, A. A., 4426
Werner, H., 1248, 1715, 3620
Werringloer, A., 3798
Wertham, F., 5830
Wertheimer, M., 5606, 5652
Wessinger, J. D., 5981
West, C. J., 798, 5607
West, L. S., 5532
West, P. V., 4100, 4885
West, R., 2706
Westerfield, J. B., 172
Westermarck, E., 716, 2979
Weston, H. C., 724
Wever, E. G., 560, 5752
Wexberg, E., 1113, 4093
Weyer, J., 1909
Weygandt, W., 3961
Weymann, M. F., 47
Wheeler, E., 2555
Wheeler, L. R., 4211
Wheeler, R. H., 420, 4258, 4951, 4952
Wheeler, W. M., 900
Wheelis, D. R., 2818
Wherry, R. J., 372, 1266
White, A. L., 5533
White, G. C., 843
White, H. D. J., 173
White, M. M., 4326
White, R. K., 345
White, S. D., 5018
White, S. E., 5831
White, W. A., 1004, 3430, 3621, 4022
Whitehead, A. N., 3133
Whitehorn, J. C., 831
Whitehouse, A. G. R., 888
Whitelaw, H., 2151
Whitely, P. L., 1888
Whiting, P. W., 1846
Whitley, M. T., 4072
Whitmer, C. A., 421, 3583
Whitnall, S. E., 48
Whitney, F. L., 1154, 4152
Whitney, L. F., 901, 910, 5755
Whittaker, M. L., 1114
Whitten, B. O., 2454
Whittington, T. H., 1716
Wholey, C. C., 5343
Wicke, R., 6110
Wickenden, A. C., 1155
Wicksell, S. D., 5557
Widenmeyer, W., 2455
Wiechulla, O., 120
Wiedemann, E., 2825
Wieg, E. L., 346
Wiener, A. S., 1863, 3317
Wiersma, E. L., 4636
Wiesner, B. P., 5176
Wiessmann, A., 5344
Wigglesworth, V. B., 892
Wilbur, M. J., 5507
Wilbur, R. L., 4637
Wilcocks, R. W., 776, 5431
Wilcox, W. W., 49, 2736, 5432
Wildermuth, H., 1005
Wile, I. S., 4427, 4520, 5909
Wilheim, I., 1462
Wilkinson, M. M., 3542
Wilks, S. S., 1624, 1625
Willbrand, H., 5639
Willemse, W. A., 717
Willey, M. M., 940
Williams, A. C., 666
Williams, D. C., 3622
Williams, E. H., 1960, 3431
Williams, F. E., 718, 4153, 4638
Williams, G. W., 1387
Williams, H. M., 2538, 4911
Williams, J. F., 314
Williams, J. J., 2980
Williams, T. A., 1961
Williamson, E. G., 4154
Willoughby, R. R., 422, 1185, 1645, 3039
Willoughby, W. C., 719
Willrich, U., 3305
Wilson, D. C., 2920
Wilson, E. B., 1626, 5980, 6128
Wilson, F. N., 1799
Wilson, H. E. C., 1800
Wilson, I. G. H., 1962
Wilson, J. A., 1717
Wilson, J. H., 4867, 5534
Wilson, J. L., 3584, 3585
Wilson, L. A., 3077
Wilson, M. C., 1599
Wilson, M. O., 4155
Wilson, P. T., 1864, 3310
Wilson, V. A., 1939
Winckler, G., 3962
Windisch, E., 5027
Winkel, L., 1910
Winkler-Hermaden, V., 4797
Winsor, A. L., 524
Winsor, C. P., 1627
Winston, E. B., 4639, 4640
Winston, S., 134
Winternitz, M. C., 2921
Winterstein, A., 1911, 3512
Winterstein, H., 3767
Winthuis, J., 2035
Winton, S., 5433
Wirth, W., 1912, 5028
Wishart, J., 1628, 5558
Witmer, H. L., 1425
Witschi, E., 2380
Witt, D. B., 1323
Wittels, F., 746, 5434, 5832
Witting, E. G., 3278
Wittmaack, K., 5640
Witty, P. A., 756, 1507, 1567, 1801, 3078, 4094, 4912
Witzel, A. E., 5910
Woellner, R. C., 3519
Woestijne, W. J. van de, 5435
Wohlfahrt, E., 3684
Wojciechowski, J., 6111
Wolcott, W., 4913
Woldstad, D. M., 2981
Wolf, E., 528, 1337, 1847, 4156, 5177, 5178, 5436
Wolf, W., 5641
Wolfe, A. B., 2835
Wolfe, S. M., 1076
Wolfe, W. B., 5911
Wolfensberger, T. P., 678, 1388
Wolfer, L., 3432
Wolff, H. G., 799
Wolff, J., 50
Wolff, W., 1214, 1389, 5015, 5833
Wolfle, D. L., 4953
Wolfle, H. M., 525
Wolter, K. K., 3875
Woltereck, R., 5778
Wolters, A. W., 3134
Wood, A. E., 5982
Wood, B. D., 364, 1629
Wood, E. P., 4157
Wood, E. R., 5535
Woodall, C. S., 2323
Woodard, J. W., 3079, 5980
Woodbridge, F. J. E., 4259
Wood-Comstock, B., 3035
Woodrow, H., 828, 5029
Woods, A. H., 4641
Woods, H. M., 5183
Woodward, E. W., 2539
Woodworth, R. S., 4521
Woodyard, E., 5413
Woody, C., 4868
Woofter, T. J., 6118
Woollard, H. H., 498
Woolley, H. T., 1156
Woolston, H., 3483
Worcester, D. A., 6112
Wortis, S. B., 5179
Wray, R. P., 6113
Wreschner, A., 1722
Wreschner, L., 6129
Wright, A. D., 631

Wright, E. A., 4869
Wright, R., 2922
Wrigley, L. J., 330
Wu, P.-L., 4642
Wulf, O., 5753
Wullen, H. H., 4023
Wunderle, G., 3484
Wunderlich, H., 3620
Wuth, O., 3963
Wyatt, H. G., 80, 1252
Wykoff, G. S., 2636
Wyndham, H. S., 1157

Yakovleva, V. V., 4470
Yamamura, M., 5834
Yamane, K., 2826
Yang, S., 5559
Yanigida, T., 2540
Yarmolenko, A. V., 747, 6049
Yasser, J., 1508
Yatabe, T., 2237
Yearsley, M., 4643
Yefroikin, Z., 6050
Yepsen, L. W., 5536
Yerkes, R. M., 2313, 2702
Yntema, T. O., 3586
Yonkman, F. F., 1680
Yoshida, S., 2737, 2738
Yoshimasu, S., 2381, 2867
Yoshioka, J. G., 1331, 2314, 2315, 2827
Young, D. R., 2036
Young, J. Z., 3685, 3686, 5668
Young, K., 1077, 1963
Young, P. T., 468, 1848, 2287, 2316, 4327, 4712
Young, P. V., 4024
Young, R. H., 2924
Young, W. C., 5180
Yourievitch, S., 2238, 3687
Yü, S. M., 1115
Yudin, H. C., 5754
Yugelevsky, A. S., 1802
Yura, T., 29

Zacharoff, L., 3964
Zachry, C. B., 4713, 4870, 4871, 4872
Zalla, M., 3433
Zama, G., 4977
Zambaldi, G., 5537
Zanfrognini, P., 5250
Zapan, G., 3268, 4260
Zarncke, L., 278
Závadský K., 3799
Zawirska, J., 2556
Zeiner-Henriksen, K., 1441
Zeise, L., 5642
Zeisl, H., 4681
Zeleny, L. D., 1509
Zeller, W., 1324
Ziegler, V., 3688
Ziehen, T., 5643
Zients, S. B., 4032
Zietz, K., 6051
Zigler, M. J., 461
Zilboorg, G., 3876
Zillig, M., 1116
Zimmerlein, K., 5983
Zimmermann, A., 2456
Ziveri, A., 2868
Zsako, I., 5345
Zubin, J., 2152, 2162
Zweig, H., 220
Zwetkow, A. N., 5008
Zyve, D. L., 2153

SUBJECT INDEX

Ability and age, 3098
constitution and, girls, 327
grouping, 1569, 2115, 2606, 4844
Brazil, 6061
index, college, 1568
measures, intercorrelation, rat, 530
mechanical, critique, 2160
music, 2029
older men, 1890
opportunity for, 3971
race mixture and, 4471
special, 1171
vocational, patterns, 2064
wealth and, 4649
(See also *Aptitude, Capacity*)
Abnormal child, 4756
delinquents, classification, 4635
psychology, textbook, 3367
vocational guidance for, 3919
Abnormality and constitution, 4789
delinquency and, 1562
lip reflex in, 4600
Abstinence, neurotic, 2363
Abstraction in bee, 3302
form vs. color, 2723, 2724
isolation and, 65
(See also *Thought*)
Accent, 1464
Accident and alcohol, 1371
distribution, 4030
form, 1526
neurosis, 2446, 4625
false judgment in, 1063
personality and, 284
prevention, 288, 720, 1531, 2038, 4731, 6002
proneness and intelligence, 2545
test, 4031
statistics, 1083
testimony, 5651
by psychotechnician, 279
traffic, 292, 1078
lightning and, 1512, 1513
Accommodation, 1246, 3632, 3671
astigmatism in, 2708
lag, 4296
in old age, 1703, 2713
snake, 3791
eye, 2304
visual, 1702
(See also *Vision*)
Accuracy and speed in work, 3507
Accusation of self, 5939
Achievement, college, correlations, 1593
delinquents, 312
ideal and, 3751
in integrated curriculum, 6076
measurement of, 1577
prediction, 349
high school, 4810
sex difference, 2121, 2651
test, 1586
in activity curriculum, 6075
college, 2626
elementary school, 2601
English, 2650
high school, 761
marks vs., 1604
transient children, 340
(See also *Scholarship*)
Acid and alkali balance in psychosis, 3963
stimulus, sunfish, 3276
Act, completion of, 53
incomplete, 77
Action and character, 1389, 2839
current, 3198, 3617
audition, 439
in anesthesia, 1742
central nervous system, 5687
crustacean, 5741
from dorsal roots, 1740
heart muscle, 1799
from intestine, 1296
muscle, 3259
contraction, 3257
nerve, 3199, 3200, 3217, 3723
cortex vs., 1734
Nitella, 4429
rabbit, 1272
in thought, 477
Gestalt in, 1304
potential components, retina, 5617
retinal, 5672
thought and, 4290
Activity apparatus, animal, 784
child success and, 3000
child, 2557
cockroach retention and, 2299
curriculum, essentials in, 6075
extra-curricular, and scholarship, 2637
rat hormone and, 2812
pituitary and, 5745
temperature, rat and, 560
rating, child, 2576
school, 1575
in sleep, child, 3020
(See also *Motility*)
Acuity in audition, 31
bee, 1847
depth perception, 1700
heteromodal stimulation and, 4278
monocular, 1232
heterolateral illumination and, 4277
sensory, 3285
visual, 1709, 2720, 2736, 3640
automobile driving and, 47
background and, 3636
glare and, 3628
Adaptability and age, woman, 3437
test, 3594
Adaptation, brightness in, 3624
dark, *Phycomyces*, 527
heat, animal, 2820
isopod, 1841
negative, 866
in reflex, 867
pain, 2203
perception, 3146
photopic, 812
pressure, 461
Adder, hibernation, 1830
Adenine effects, 929
Adenoids and skull-face values, 3017
palate values and, 3018
Adjective, feeling tone, 3175
Adjustment, 4521
adult, and child environment, 342
colonial physician, 1927
correlations, 1369
deaf child, 2129
desires and, 344
after divorce, 1060
inventory, validation, 331
marks and, 1604
marriage, 1046
in neurosis, 205
parent and child, 4758
poor, tests in, 3590
pupil, 3562
questionnaire, 4143
school, 2109, 4620
psychosis and, 322
in senility, 3340
sex education and, 4713
teacher, 2136
(See also *Instability, Personality, Stability*)
Adler vs. Freud, 3955
Administration, personnel, 4741
Adolescence, 302, 1539, 2066, 2093, 2569, 3035, 3036, 4068, 4762, 6040
association in, 4768
in boy, 4077
character in, 2092
study, 3333
crime in, 3478
day-dream in, 1547
delinquency in, 2587
development, 329, 1560
diary, 729
expression in, 4773
family in, 1100
graphology and, 337
homesickness in, 319
leadership in, 2334
literature appreciation in, 750
longing in, 4764
as maturation, 3545
mental hygiene, 1098
motor ability in, 4070
national feeling differences, 745
negative ideal in, 3550
neglect, 2082
negro, intelligence, 2459
newspaper in, 3513
only child, 4784
perception, 2091
personality in, 3003
poetry of, 333
politics and, 4711
pornography in, 6026
prison life, 1484
psychology, 3549, 4791
psychopathy in, 3405
reading in, 735
interests in, 4796
rebellion and delinquency, 4746
religion in, 326, 2031, 2083, 4090
mental hygiene and, 1114
school ability, 2147
textbook, 6013
vocation and, 3515
wish in, 344, 744
(See also *Child, Puberty, Youth*)
Adoption homes, child, 2578
parents in, 1553
selection in, 3011
Adrenal function, 2776
rat, 1815, 2772
Adrenalin and emotion, 52, 55
iris, 1312
leucocytosis and, 1778
mucosal reaction in deafness, 123
sympathetic and, 4335
vasodilation and, 2254
Adrenin and emotion, 616
iris and, 43
Adrian, E. D., appreciation, 1191
work of, 844
Adult intelligence, 3596
language learning, 1574
learning, review, 5723
student, interests, 4828
Advertisement, color in, 2984
efficiency determination, 4715
recall, 4714
Advertising, 4032, 4733, 6007, 6011
amount read, 5987
attention in, 3494
effectiveness, 3502
pleasure in, 3496
sex motive, 3493
symbolism, 3492, 3512
slogan, effectiveness, 3327
suggestion in, 3495
Aesthetics, see *Esthetics*
Affect, 2741
motor expression, 158
pressure and, 468
theory, 3179
experiments and, 1718
value of situation, 54
words, 467
(See also *Emotion*)
Affectivity, 3689
body type and, 3173
change with repetition, 2241
learning and, 3181
pressure and, 462
in schizophrenia, 2923, 3877
scholarship and, 1583
theory, 4300
type and, 463
Africa, language richness, 3450
After-image, 438
colored light, 3637
mirror projection, 1265
negative, 38
twilight vision, 1226
Age and ability, 3098
man, 1890
adaptability and, woman, 3437

calculation, 769, 2102
college success and, 3062, 4111
differences, intelligence, 4177
wishes, 344
distribution, Germany, 1984
fecundity and, 901
grade and, child, 2137
handedness and, 1780
heart acceleration and, 5700
illusion susceptibility and, 5618
intelligence and, 4183
learning and retention, 2746
in marriage, 1359
occupation and, 3486
psychosis and, 4639, 4640
reaction time and, 3225
resemblance of siblings and, 3309
speech and, 261
strength and, 4418
Agnosia, 661
Agriculture, fitness for, 3499
Alcohol and attention, reaction, 1371
diuresis, 5717
effects, 575, 935, 948
on child efficiency, 4488
on driving, 293
hypnosis and, 1376
motor reactions and, 1797
nerve block, 5683
review, 933
tremor and, 1040
Alcoholism, 640, 4510, 4607
campaign against, 3868
chronaxy in, 1291
delirium, 4577
encephalitis and, 2919
in Germany, 3832
malaria and, 3934
mania following, 3374
nasal mucosa in, 5726
psychoanalysis of, 3323
psychosis, 1415
sensitivity in, 1396
sequelae, 1405
sex and, 1923
therapy, 2899
treatment, 963
Aleut, ethnology, 3465
Alexia, 661, 3915
Algebra ability and intelligence, 4145
All-or-none law, snail, 5676
maze learning, 5716
Alopecia, 1685
Alpha test in diagnosis, 4210
Alteration, delayed, in raccoon, 5731
Alzheimer disease, 4589
Amaurotic family idiocy, 3409
Ambivalence and repression in work, 2554
Amblyopia, psychogenic, 4270
Amblystoma brain, proliferation rates, 2795
lateral line, 3298
Ameba, electricity reaction, 537
plasmagel rupture, 118
stimulation effects, 3290
American Psychological Association, clinical section, 5593
Ithaca meeting, 1189
meeting, 2183
N. Y. branch, proceedings, 1186
proceedings, 1205
Ametropia, twins, 1717
Amnesia in crime, 3990
post-hypnotic, and practice effect, 595
retrograde, 3376
specific, 5794
suicide, and obsession, 2880
(See also *Memory*)
Amphibian, see *Amblystoma, Frog, Toad, Triton*
Amphipod statocysts, 3799
Amplifier, 409, 2701
Ampulla, fish, 2794
Amputation, illusion, 3654
Amusia, case, 3394
Amyostasia, gait disturbances, 1395
Anatomy, child, 2993
Ancestor worship, 3992
Anemia, nervous disorders of, 4618
neurologic features, 2924
Anesthesia, audition in, action currents, 1742
hypnotic, 937
local electric, 3156
nitrous oxide, 591
and reflex, vasomotor, 508
spinal, 3207
touch and, 1695
Anger, 3174
outburst, child, 4084
pathological, 3972
in play, 1546
Animal behavior, 1824
catatonia by drugs, 632
conditioning, review, 5744
conversing, 3780
drive, 1819
heat adaptation, 2820
instinct, 550
intelligence, 3274, 4432
learning, 114
mind, 3796
myopia, 1686
nerve activity, 3779
orientation, 3777
psychology, 1329, 1814, 2300, 3122, 4453, 4465
in pictures, 1813
in society, 2288
sociology, 3770
threshold apparatus, 3612
(See also *Arthropod, Earthworm, Hydra, Mollusk, Platyhelminthes, Vertebrate*)
Animism in thinking, 737
Ankle, work of, 1768
Annelid, see *Earthworm*
Annoyance and behavior, 465
Anorexia, hysterical, 2480
Anosmia, 5610
hereditary, 5770
Anoxemia, cat, 3297
effects, 3853
fatigue and, 1302
gastric motility and, 1297
pain and, 1307
Ant behavior, 4455
colony, foundation, 900
eye, 3798
learning and motivation, 4454
maze learning, 533
orientation, 3293
swarming, 536
Anthropology, 235, 263, 3984
critique, 5950
education and, 4119
methods, 5955
psychiatry and, 3416
psychoanalysis and, 580
religion in, 4663
social, 706
(See also *Ashanti, Australia, Bantu, Berber, Culture, Custom, Eskimo, Ethnography, Folk, Jew, Kinship, Maori, Mexican, Mountain, Mulatto, Negro, Primitive, Race, Totemism*)
Anthropometry, 1311
of army officer, 1786
child, Russia, 2566
Anticipation error, rat, 4457
in maze learning, 837
in psychosis, 5889
reaction, 5698
Antidromic impulses, 1279
Anxiety, 2863
without affect, 3876
castration, 2333
cholin treatment, 2434
civilization and, 4503
death instinct and, 137
examination, 3810
menstruation, 141
neurosis, 924, 5802
nightmare and, 4494
obsession, case, 2889
organism in, 4595
pregenital, 3838
psychosis, alcoholic, 1415
Ape vs. child, learning, 3787
research, Yale, 2310
Aphakia, 2207
Aphasia, brain in, 5899
case, 3903
in epilepsy, 3931
language and, 5863
speech in, 3395
Apoplexy, sensory disturbances, 1441
Apparatus, acuity charts, 10
amplifier, 409, 2701
animal activity, 784
audition, 3614, 5592
battery, 3109
bone conduction, 4831
campimeter, 1200, 2171
cathode-ray tube, 5585
child observation, 3131
choice reaction, 781
chronoscope setter, 396
color difference limen, 401
mixer, 393
computation, 1158
for conditioning, 2692
control key, 395
current amplifier, 2191
curve fitting, 4878
electric, 2679
electrode, 390, 394
ergograph, 1668
esthesiometer, 5577
excitability testing, 3763
eye movement recorder, 1212
galvanic reflex, 391
galvanometer, 3120
hand movement, 1802
heat grill, 406
journal, 2169
kymograph, 1680
language recording, 5584
light intensity measurement, 5597
measurement, 4242
maze, 384, 417, 1193
automatic, 5587
memory, 4212
miscellaneous, 2175
nerve impulse speed, 3195
noise measurement, 4240
nystagmus, 1760
observation board, 1679
olfaction, rat, 4252
optical, 1201
oscillograph, 3107, 3617
paper maze, 24
phase cycle constancy, 9
photoptometer, 5581
for plant movements, 410
polygraph, 385, 388
projector, 3130
reaction time, 5579
recording maze, 3116
resistance box, 389
rotary switch, 407
sectored disk, 5574
shock timing, 777
size-lenses, 801
skin deformation, 4273
sleep recording, 1678
sound filters, 5582
generation, 1651
steadiness measurement, 5599
stimulating, 795
stroboscope, 3608
synoptophore, 2207
tachistoscope, 400, 2177, 4253
tangent meter, 3121
for threshold, animals, 3612
time marker, 1208
recording, 4218, 4226
timing, 421, 3605
Apparition, 4493
Appeal of drama, 4038
Apperception, Wundt on, 4248
Appetite, child, 3552
Appreciation correlations, 1452
literary, 240, 750
of poetry, 4835
test, 1573
music, 4671
Apprentice, reading of, 735
speech of, 1994
test, 287
training, 1082, 2043
Apprenticeship, 6111
Apraxia, 3915
Aptitude, 1644
dentistry, 4737
in games, 4749
investigation, 5991
law, 1516
mathematics, 3040, 3043, 3073
mechanical, of prisoners, 4011
motor skill and, 2284
prediction, engineering, 4722
teaching, 3049
test, 1630, 6111
college, 348
engineering, 3487
law, 2947

medical, 2133, 2608
scholastic, 1170
science, 2153
selection by, 3509
validation, 722
for workers, 286
testing, 1515, 1525, 3488
in industry, 1520
in school, 2132
(See also *Ability, Capacity*)
Archaeology, type method, 5936
Area and brightness, 2231
perception, 2709
Aristotle, psychology of, 408
Arithmetic ability, 1126
heredity, 122
error in, 1120
incentive, 1571
investigations, 2603
preference vs. performance, 4805
social problems and, 6058
test, 4095
transfer of training, 2641
vocabulary, 4848
work book, 2628
Arm folding, heredity, 1863
type, 3317
Arrangement, tool, 285, 294
Arson and homosexuality, 5983
Art, 1051, 2481
ability, heredity, 5763
personality and, 230
analysis, 1471
appreciation, correlations, 1452
artist and, 1485
beauty in, 2977
Berber, 2936
child, 2120
race differences, 4091
Chinese, 4653
expressionism in, 2356
extremism in, 2944
judgment test, 4662
mediumship and, 2340
personality and, 237, 1878
primitive, 272
religion and, Maya, 2935
sequence and culture, 5974
sex and, 3995
significance, 2487
social experience and, 4651
teaching, 2286
test, 4668, 4895
(See also *Beauty, Creativity, Drawing, Esthetics, Picture*)
Arthropod, light orientation, 3771
muscle action, 3793
(See also *Crab, Crustacea, Insect, Isopod, Limulus*)
Arthur point-scale, 4886
Ascendance test, revision, 3587
Ashanti hinterland, 2519
Assimilation of Maori, 4654
Assistance, forms, 4009
Association, 69
character type and, 1261
college boys, 4768
to color, 4029
controlled, time, 1260
familiarity, 3183
of ideas, 74
responses, significance, 4323
score and intelligence, 377
sex difference, 80
span, rat, 1844
test, Binet, 379
Chinese children, 72
presidents in, 6094
(See also *Companionship*)
Astereognosia, 3638
Asthenia, 4529
Asthenopia, 2441
Astigmatism in accommodation, 2708
Ataxia, hereditary, 131
Atheism, determinants, 1905
Athetosis and chorea, 674
Athlete, motor and mental ability, 523
Athletic status and pulse rate, 5695
Athletics, attitude toward, 4141
smoking and, 574
(See also *Sport*)
Attention, 1259, 2242, 3695
in advertising, 3494
alcohol effects, 1371
body sway and, 484
capillaries and, 4312
child, 3535, 6041
directed, in learning, 3185
distractors, 835
lack in child, 4078
muscular capacity and, 97
psychosis and, 5900
range, 2243
experiment, 3694
restriction of, 5629
in school, sex difference, 4854
skin temperature and, 4313
test, 5656
visual field and, 1257
(See also *Distraction*)
Attitude toward athletics, 4141
character and, 3321
child, 3519
cinema and, 2589, 2590
civilization, 2489
in community, 1489
critical, 4318
of customer, 3511
toward death, 3881
toward Decalogue, 4703
delinquent boy, 4777
differences, social groups, 2000
drama and, 2030
emotional, 56
employee, 4725
family and delinquency, 740
Filipino, 2963, 4689
honesty, in college, 3570
life, 1894
maternal, in child guidance, 4772
measurement, 1885
negro, and education, 1979
of patient, 2915
parental, and child personality, 4754
mental hygiene and, 4089
practice and, parental, 4061
in pregnancy, 3916
on prohibition, student, 5976
propaganda effect on, 5923
race, in press, 690
student, 4667
religious, 1968
Jew, 2010
scale, 3466
construction, opinion in, 1179
criteria, 1184
school board members, 3435
on sex, 2032
toward sibling, child, 6029
social, 709
research, 2458
of criminal, 2488
of student, 2474, 2497
student, 2006
China, 3047
test, 3103
toward time, 1992
unemployment, 4024, 4681
war, and churches, 1978
in college, 2972
of students, 1980
withdrawal, 5821
(See also *Belief, Opinion*)
Attractiveness and distance of objects, child, 2999
Aubert-Foerster phenomenon, 3649
in vision, 815
Audition, 2214, 3154, 3168
action current, 439
acuity, 31
anesthesia, electric phenomena, 1742
apparatus, 5592
bone conduction, 5640
cat and sex, 1805
child, 809
in choked labyrinth, 4268
and constitution, 4265
defects, aviator, 6009
dog, 115
fish, 559, 3299, 3778
guinea pig, 2298
Jew, 2521
learning by, 1514
in maze learning, 1758
mechanism and hunger, 450
nerve experiments, animal, 5752
Wever-Bray effect, 1682
pathological, heredity, 5757
phase effect, 2201
physical basis, 2732
psychophysics, 442
reading in blindness, 1683
reeducation, 805
senility, 818
sensitivity, 821
variation, 423
of speech by deaf, 811
tensor tympani in, 3278
test, 3140
theory, 810, 1243, 1694
threshold, 2712
turtle, 3292
vision acuity and, 4278
quickness, 3162
voice and, 1975
Wever-Bray effect, 2706
(See also *Acuity, Deafness, Ear, Intensity, Noise, Pitch, Sound*)
Aura, 1867
explanation, 579, 3645
Australia, aborigines, 2929
Autobiography and psychoanalysis, 2339
Automatism, 3928
Automobile accident, 292
driver, visual acuity, 47
Autonomic in epilepsy, 2436, 2437
Autosuggestion in analysis of psychotics, 5836
Autotomy, controls, 3301
Avarice, 1384
petty, 2359
Averages, correlation between, 6114
Avertin narcosis, 3837
Aviation effects, 4717
experiences, 2553
psychology, 295
(See also *Pilot*)
Aviator, audition defects, 6009
selection, 4033
Axon, frog, 3275

Babinski reflex, 5727
primate, 3280
Background and visual acuity, 3636
Bantu beliefs, 719
Basedow after trauma, 3422
Basic English dictionary, 3997
Baton movements, 5918
Battery, air-cell, 3109
Beauty, 4651
art, 2977
intelligence, scholarship, 4843
judgment, race difference, 1477
magic and, 2460
preferences, 680
(See also *Art, Esthetics*)
Beaver dam construction, 2312
habits, 1806
Bee, abstraction, 3302
Gestalt, 539
gustation, 3279
time sense, 3271
tradition, 4462
ultra-violet perception, 4446
visual acuity, 1847
Beetle, tropism, 2302
Behavior clinic, 2617
constancy and brain injury, 4436
child, 2572
mechanism, monkey, 3285
mind and, 4257
problem, 1557
improvement, 4767
physique in, 4790
special school, 2604
type, detection, 2353
Behaviorism, 789, 794, 3611, 4246
Gestalt and, 1655, 2181
psychotechnics and, 3498
in sociology, 2011, 5916
Belgium, institutions, 4560
Belief, Bantu, 719
custom and, 716
in science, 26
socio[1]gy, 2009
unfounded, and science instruction, 1572
(See also *Attitude, Opinion*)
Bereavement, family, 1027
Berber art, 2936
Beri-beri, ganglion changes, 2796
Bernstein, memory test, 1643
Betz, W., early work, 4255
obituary, 402
Bias in marking, sex, 2634
Bibliography, educational psychology, 6064
research, 4869

exceptional child, 4761, 4765
family, 1498
fish behavior, 549
Jackson, J. H., 671
learning, 2277
mental hygiene, 2875
Oklahoma faculty, 12
philosophy, 4220
preschool and parent education, 4823
primary education, 4834
psychiatry, 3938
psychology, 2676
remedial reading, 4859
statistics and test construction, 6116
teacher training, 4804
test, 3097
(See also *Review*)
Bicycling vs. running, 2771
Bilingualism, 1492
Binet scale, revision, 1635, 4894
performance and intelligence, 4198
Biography, 779, 4505
(See also *Autobiography*)
Biology, organization, 5604
psychology and, 5589
subjective aspects, 2700
teaching, 4129
textbook, critique, 2649
Biometry, army officer, 2783
Biophysics, 2269
Bird domination, 1804
embryo behavior, 542
reflex, 895
flight and moonlight, 112
food habits, 4460
learning, 2311
sex behavior, 1820
visual conditioning, 3768
wing, innervation, 5750
(See also *Chick, Dove, Fowl, Parrakeet, Pigeon*)
Birth control, 1346
fertility and, 129
mental hygiene and, 5902
hemorrhage, 6017
lesion, 4551
hypophrenia and, 621, 2402, 2406, 5857
order in cyclothymia, 5841
rate, differential, 567, 568, 901, 902, 909
Italian, diminution, 5766
occupational differences, 906
religion and, 910
(See also *Fertility*)
Bladder control, child, 3551
reflex, 5690
sensitivity, 1749
Blind child, gifted, 3001
personality, 4771
picture recognition, 4839
spot, 3145
sensitivity, 806, 3688
Blindness and emotional expression, 3522
facial expression, 4269
geometry teaching, 1133
heredity, 121, 1341
hypophrenia and, 2873
hysterical, 975, 1940
mental hygiene, 4863
mimicry, 2205
night, and vitamin deficiency, 1704
partial, child, 3055
psychogenic, 976
reading, 1222
sound reading, 1683
space perception after, 1712
teaching reading in, 1140
touch recognition, 5625
(See also *Vision*)
Blinking, 2225
Bloc identification, 1499
Block building, child, 6032
Blood change, emotion, 1249
intoxication, rat, 2817
content and exercise, 4421
galvanic reflex and, 882
count in psychotic disturbance, 4601
pressure measurement, 1294, 1755
schizophrenia, 5797
variations, 4417
in work, 1792
sedimentation, psychosis, 219
type and character, 4501
temperament and, 2377
volume and sympathetic system, 1280
(See also *Circulation*)
Body image, 452
interest in child, 3012
mind and, 4241, 5605
as phallus, 3848
size and current sensitivity, 3160
-soul problem, 1673
type, 1300, 2828
affectivity and, 463, 3173
character and, 2862
child, 3014
delinquency, 717
nationality and, 3053
psychosis, 1918
respiration and, 860
schizophrenia and, 3413
weight and, 2585
woman, 4384
(See also *Constitution*)
Bolyai, J., significance, 5601
Bone conduction apparatus, 4831
of sound, 5640
rat diet and, 3797
Books in home, 3539
Botany, ethno-, 2948
interest, heredity, 3801
Boundary effect on space estimation, 4289
Bourneville disease, 3383
Bowing on stringed instruments, 3490
Boy, adolescent, 4077
delinquent, interests, 1497
homeless, 5947
menstruation attitude, 927
negro, delinquent, 1974
popularity and personality, 3529
runaway, 6014
scout, conduct, 1542
sex growth, 2577
Brain abscess, 1001
symptoms, 853
anatomy, 89
in aphasia, 5899
area and reasoning, rat, 1334
and vision, rat, 1333
character and, 3204
chemical topography, 3203
development, 217
electric activity, 81
evolution, 1746
fields, 5686
rabbit, 5746
fore-, comparative structure, review, 852
frontal convolution, 3213
growth, *Amblystoma*, 2795
heat regulation and, 491
infant, 1092
injury, 670
behavior constancy and, 4436
effects, 1283
symptom, 1407
intelligence and, 2877, 3613
irradiation effects, 1284
Lebanese, 1285
mechanism and emotion, 1719
muscle vs., 3212
opossum, 111
regeneration, earthworm, 5739
research, Russia, 4349
study, Russia, 3218
surgery, epilepsy and hypophrenia, 4591
tissue loss and behavior, 496
tumor, 613, 615, 4547
concomitants, 2416
labyrinth syndrome and, 3387
psychosis, 2870
symptoms, 4610
vision and, 429
weight and form, 2255
(See also *Cerebellum, Cerebrum, Chorioid, Cortex, Diencephalon, Frontal, Hypophysis, Hypothalamus, Localisation, Medulla, Meninges, Nerve, Peduncle, Pons, Red nucleus, Sella, Thalamus, Ventricle*)
Breathing, see *Respiration*
Bridge psychology, 2930
Brightness in adaptation, 3624
area and, 2231
in circumscribed field, 4264
constancy, 2718
differential limen, 5619
paradox, 822, 2210
reading, 455
relation, rat, 3776
threshold, 457
visual field and, 1707
Broca area, 5686
Bromide effect, dog, 4451, 4452, 4470
for inhibition removal, dog, 4448
Brush, E. N., obituary, 3607
Buddhist psychology, 3124
Building, child, 6025, 6032
Bulbocapnin in animal, 632
effect, man, 4555
rabbit, 4431
muscle tone and, 94
respiration centers and, 2764
Burial mound, 2950
Business, personality, 2549

Caffein effects, 929
muscle fatigue and, 502
problem solving and, 4495
Calculation, dog, 5753
Campimeter, 1200, 2171
Campimetry, 2229
Canada, French vs. English, 4674
Cancer cases, reaction time, 4636
psychotherapy, 3365
Cannibalism, dog, 1816, 1829
Capacity test, music, 5975
(See also *Ability, Aptitude*)
Capillaries and attention, 4312
Capitalization, 2620
error, 3573
Card indexing, 2058
sorting, 841
Care, diagnosis, 6012
Cartoon, social control, 4672
Case record and statistics, 5982
work, psychology, 1479
Castration anxiety, 2333
dog and conditioning, 3732
rabbit and sex ability, 1338
rat and learning, 529
theelin and, 4426
Cat, anoxemia, 3297
cerebellum extirpation, 2800
cord transection, 113
cortex growth, 4347
food behavior, 4433
galvanic reflex, 4449
geotropism, 555
glowing eye, 3663
learning, 2309
motor cortex, 2818
posture and red nucleus, 489
pupil stimulation, 3303
righting reflex, 1286
sex and audition, 1805
spinal extensor reflex, 1779
flexor rigidity, 3775
sweat innervation, 2257
secretion, 2259, 2260
sympathetic and ischiadicus, 2824
tendon reflex, 3254
vagus, 2801
Catalepsy, 3897
chronaxy, 2396
Catatonia, experimental, 632, 954
head posture, 4561
hysterical, 1926
personality, 946, 947
Category structure, 478
Caterpillar, color vision, 4441
Catfish aggregation, 4434
nerve degeneration, 5743
taste bud innervation, 5635
Catharsis vs. psychoanalysis, 678
Cathode-ray tube, 5585
Cause, 5605
psychoanalysis and, 2366
Cell degeneration products, 2193
Cenesthesia, 3928
Cerebellum, abscess, 960
chronaxy and, 3721
effects, 2281
extirpation, cat, 2800
fish, 5749
function, 612
labyrinth vs., 3759
lesion, 5854
color vision, 5614
Cerebrum insufficiency, 3428
fluid and mental deterioration, 5860
lesion, schizophrenia, 4548
Chance in multiple-choice test, 770
order, alternating stimuli, 2684

Change stimuli, monkey, 2816
of work and efficiency, 4726
Character, 159, 693, 1907, 3813
action and, 1389, 2839
adolescence, 2092
analysis, 2846
attitudes and, 3321
blood type and, 4501
body type and, 2862
boy, 3333
change, epilepsy, 2888, 3380
and culture, 256
education, 1134, 1548, 6086
effect, orphanage, 6031
factor, 2842
feminine, 3838
folk, 1503
food and, 2330
gait and, 3812
instinct and intelligence, 608
intelligence and, 4492
of leaders, 2361
localization, 3204
love and, 1995
mate selection and, 2535
mental hygiene and, 2874
neurosis, 5811
operatives, 2360
perseveration and, 3101
reading, 1870
review, 3852
sex difference, 1906
study, 155, 2368, 2868, 3350
child, 2998, 4795
review, 570, 5784
test, 2328, 2329
review, 5828
textbook, 588
training, child, 728
traits, twins, 564
type, 2351, 3821
(See also *Personality, Temperament*)
Characterology and expression, 2331
Chauffeur test, 5997
(See also *Driver*)
Cheating, prevention, 4827
(See also *Honesty*)
Chemical mediators of nerve impulses, 5663
Chemistry information, usefulness, 6113
test, 1591
tissues, 2261
Chick cornea, development, 1336
Chicken, color vision, 526
learning factor theory, 3774
reward and, 1809
Child, abnormal, care, 4750
primitives and, 6048
reaction time, 4051
test, 4069
activity, 4050
in sleep, 3020
study, 2557
adjustment and family harmony, 2938
and psychosis, 322
adopted, home, 2578
African, 2588
aid society, Russia, 3031
anatomy and physiology, 2993
anger outburst, 4084
anthropometry, Russia, 2566
vs. ape, learning, 3787
appetite, 3552
aptitude, games, 4749
art, race differences, 4091
attention, 3535, 6041
lack, 4078
attitude, 3519
cinema and, 2589, 2590
to mother employment, 3023
attractiveness and distance of objects, 2999
atypical, 1096, 2123
audition and vision, 809
behavior constancy, 2572
observation, reliability, 4787
problem, 2990, 4767
bladder control, 3551
blind and deaf, 3522
personality, 4771
picture recognition, 4839
body interest, 3012
type, 3014
books, 3539
care, 2582, 4071, 4075
adoptive, 1544
results, 1534
character study, 2998, 4795
training, 728
vs. chimpanzee, form discrimination, 2802, 2803
cinema effects, 2586
clinic, 1090, 1097, 1111
recording, 2561
collecting, 2997, 4094
color discrimination, 2562
preference, 4755
concept, 3016, 3524
formation, 3548
conditioning, 3555, 5696
conduct and cinema, 2568
disorder, 2563
as consumer, 1545
convulsions, 3411
court statistics, 4646
creative ability, Russia, 2595
development, 2120
cremaster respiration, 3762
crippled, education, 3056
deaf, 727, 3027
motor abilities, 1701
in school, 2129
defective, 1094
problem, success, 4622
vision, 3055
delicate, 4146
delinquency, 1089, 2013, 2016, 2028, 3434, 3540, 4076
abnormality and, 1562
care, 1541
cause, 1965
economics and, 2970
immigration and, 5914, 5915
Russia, 2965
delusion, 3528
dependent, care, 1559
intelligence variation, 3015
depth perception, 741
development, 2128, 4046, 4068
influence, 1537
principles, 4074
reflex, 3025
test, 5562
diet, 4081
difficult, 4747
disabled, age-grade progress, 4846
distraction, 3544
divorce and, 4751
dramatic play, 3553
drawing, 2084, 2086, 3019, 4794
principles, 2065
dream, 2567, 3039, 6028
dull, mental growth, 4211
eating habits and personality, 4753
efficiency, alcohol effects, 4488
eidetic imagery and drawing, 328
emotional adjustment, 1103
development, 3517
emotions and stimuli, 2096
endocrine psychosis, 4633
environment and adult adjustment, 342
envy and hate, 6050
epilepsy, 175, 1432
ethics, 324, 743, 1563
examination, 2584
exceptional, 4766
bibliography, 4761, 4765
exercise effects, 880
experience, 3531
personality growth and, 610
eye dominance, 4793
eyedness and handedness, 6044
fairy tale, 3037
family and, 1106, 6016
fantasy production, 6033
fears, 4056
in fiction, 3541
form board performance, 1564
color preference and, 6032
comprehension, 320
reproduction, 3006
foster, personality, 2071
friendship, 2574, 2581, 3008, 5972
generalization, 482
gifted, 726, 1102
education, 3051, 4905, 6080, 6084
intelligence constancy, 1642
IQ changes, 4188
as leader, 2564
maladjusted, 4620
reading, 1567
grade and age, 2137
graphology, 325, 337
groups, 304
growth, Porto Rico, 2088
guidance, 2560, 4783
growth in, 3005
periodicals, 4063
psychoanalysis and, 965
technique, 4759
guilt feeling, 317
gypsy, 4021
habit complexity and learning curve, 4769
hallucination, 1104
handedness, 3554
handicapped, 3546
care, 4752
education, 3077
health, 4048
Russia, 3028
height and weight, 3523
humor comprehension, 6024
hygiene, 4052
Sweden, 1101
hypophrenia, 676, 732, 3907
education, 3041
thought, 2386
training, 4531
hysteria, 1401
ideas and cinema, 2594
image projection, 1265
imaginary playmate, 2571
imagination and poetry, 4664
imitation and expression, 4776
inferiority feeling, 2080
instability, 3883
institutions, Russia, 3030
intelligence and parent vocation, 5759
interest, 1115, 4785
pictures, 1556
invention, 2575
Jewish, race consciousness, 3468
language, 3002
disorders, 4080
environment and, 6030
persistence, 6018
laziness, 2073
leader of, 4797
leadership in, 6035
learning, 3547, 4092
Gestalt in, 2079
maturation vs., 2074, 2078
punishment and, 316
letter writing, 2615
lie, 341, 2081
life, unconscious, 5814
literary, 1116
literature, appreciation, 750
mass activity, 3007
masturbation, 4049
maze, 1653
memory, 321, 1253, 3009, 4065
Brazil, 71
objects, 3024
mental hygiene, 2580
study, 3572
work, 5649
Mexican, intelligence, 4067
mental fatigue, 4114
ministry to, 226
modeling, 2072
money habits, 3525
mother attitudes and, 4772
motor abilities, 2077
bilateral transfer, 346
development, 6049
learning, 3514
mountain, intelligence, 3595
movements, 747
music life, 4760
narcolepsy in, 617
neglect, 4093
family in, 1549
negro, 2085, 2505
neurosis, 1093, 3527
number forms, 4792
obesity, 2910
object identification, 4083
of oil worker, 4064
only, 311
adolescent and, 4784
orientation, 3034
parent and, 746, 4085
adjustment, 4758

paresis, 2391
pathological family and, 3536
perception, 1566
performance test, 3589
personality, 2068
parent attitude and, 4754
study, 739
method, 3556
phobia, 306
physiology, 4058
play, 2570, 6039
fantasy and, 332
poet, 4780
poetry choices, 736
Polish, measurements, 4778
prayer, 2643
precocious, 2087
preference for parent occupation, 4781
preschool, 1156
anger and fear in, 1546
clinic service, 323
companionship, 4055
experience, 6019
habit intercorrelations, 2089
intelligence score, 2164
music, 2538
personality, 1540
problems, 1112
Russia, 2995
speech, 1532
test constancy, 1638
primitive, thought, 737
problem, 1113, 2070
care in Italy, 6034
ideals, 738
IQ constancy, 3521
psychiatry, 967
psychoanalysis, 1367, 1385, 1880, 2992, 3839, 6015
psychology, 2573, 3022, 3549
comparative, 4443
textbook, 4072
psychopathic, Rorschach test in, 3378
psychosis, 3537
development, 218
psychotherapy, 1917, 5838, 6043
punishment, 310
ideals and, 3021
quantity appreciation, 4066
rating activity, 2576
reading, 339
religion, 2565
repetition and success, 6037
representation, 6025
research, 1533
respiration, 6046
retarded, in rural school, 6053
rural, religion, 252
schizophrenic, 983, 3420
school, peculiarities, 2118
securing rapport, 4788
sentences, 3026
sex development, 4053, 4054, 4073, 4774
education, 4057, 4087
experience, 343
precocity, 1109
sibling attitude, 6029
sick, education of, 3576
sleep, 6036, 6047
afternoon, 2094
smiling and laughing, 1543
social behavior, 4786
play material and, 6045
concepts, 3010
education, 4113
history, 1091
influence on, 3013
participation, 3543
Spanish-speaking, intelligence, 4200
speech, 261
defect, 334, 1550
learning, 6023
speed and intelligence, 3046
study, 2095, 4082, 4757
apparatus, 3131
institute, 6108
Iowa, 4748
subnormal, 1570
development, 3912
success and perseverance, 3000
suggestibility, 6051
superior, 1565
IQ constancy, 4896
superstition, 1460
testimony, 742, 3698
therapy, 1916
thought, 4763
type, 2251
toys, 1105
preference, 2558
training, 302, 303, 314, 330, 731, 733, 1107, 2591, 4044, 4061, 4142, 4775
attitudes, 3038
transient, 340
twins, testimony, 2593
types, 2090
unstable, 4756
vocational guidance, 2994
walking, 3534
welfare, 1143
survey, 4043
wishes, 1554
word meaning, 3538
work, domestic, 2592
Russia, 3029
young, education, England, 2631
mirror writing, 5945
music and, 6110
(See also *Adolescence, Boy, Family, Fetus, Girl, Home, Infant, Nursery, Orphanage, Parent, Play*)
Childhood of Gandhi, 3004
Chimpanzee, Broca area, 5686
vs. child, form discrimination, 2802, 2803
infant, 1331
language, 551
China, education, 3578
experimental education, 4865
psychology, 3132
relationship terms, 2928
student attitudes, 3047
Chinese art, 4653
association test, 72
girl, metabolism, 4047
Journal of Psychology, papers, 2682
leadership, 1998
physiology text, 3058
self estimation, 4683
student, emotional glycosuria, 3729
Choice reaction apparatus, 781
time, 833
vocational, factors, 6062
will and, 101
Cholin treatment, anxiety, 2434
Chorda tympani and humoral transmission, 5702
Chordate, see *Turbellarian*
Chorea, 1434, 4525
athetosis and, 674
Huntington's, 5903
Chorioid plexus, function, 847
Christianity, ideas, 2531
Chronaxy, 851, 3223, 3239, 4350
of antagonists, 4357
asymmetry in, 1822, 1823
in catalepsy, 2396
cerebellum and, 3721
change, 3709
color and, 3728
cortex and, 4396
in different species, 3794
emotion and, 2285
external resistance and, 3708
in fatigue, 3739
frog, variation, 4423
labyrinth, 4422
measurement, error, 5710
Russia, 4354
motor, and cortex, 1735
muscle, 1795
nerve vs., 511
sympathetic and, 5711
posture and, 3761
reaction time and, 1739
significance, 2752
single fiber, 5673
skin sense, 460
in sleep, 4330
in special states, 1291
stimulus duration and, 4336
sympathetic influence, 4341
variation, 4388
vestibular, 2782
visceral, 1681
vocal cords, 1736
work and, 1292, 4358
Chronoscope, 5579
setter, 396
Church vs. cinema, 2034
war attitude and, 1978
welfare and, 259
(See also *Religion*)
Cinema and child attitude, 2589, 2590
conduct, 2568
ideas, 2594
vs. church, 2034
content analysis, 2470
in education, 4097
effect on child, 2586
morality and, 2516
sleep motility and, 2367
social effect, 2469
sound, in teaching, 6096
study, 2467
teaching, 1587
(See also *Movie*)
Circulation and body type, 860
(See also *Blood*)
City vs. country, 5913
interests, 2627
Civil Service Commission, work, 2544
Civilization and anxiety, 4503
attitude toward, 2489
philosophy, 3133
Clairaudience, 4496
Clairvoyance, 5816
Clam, vision, 3289
Class difference, pain susceptibility, 817
size, college, 2602
experience and, 4801
student judgment, 4801
social, Germany, 714
spirit, 758
Clerk, characteristics, 4718
intelligence, 4784
qualifications, 4042
success factors, 2985
test, 290
Climacterium, psychosis at, 635
(See also *Menopause*)
Climbing organ of insect, 892
Clinic, child, 1090, 1097, 1111
directory, 216, 2435
effect on behavior problems, 4767
European, 664
mental hygiene, 5849
Pennsylvania, 1397
personality test in, 1892
for preschool child, 323
psychologist vs. psychiatrist, 3518
recording, 2561
resistance in, 174
school, 1121
for university classes, 4820
Clothing, 2483
language and, 2014
motive, 151
(See also *Dress*)
CO poisoning and dementia, child, 5867
CO_2, blood, and exercise, 4421
Cockroach, learning and inactivity, 2299
social facilitation, 4439
Coeducation in hypophrenia, 4120
Coelenterate, see *Hydra*
Cognition, 4259
vectors and, 4231
Cold and pain, 2738
Colitis, psychogenic, 4527
Collecting, child, 2997, 4094
College, ability index, 1568
achievement, intelligence, personality, 4112
tests, 2626
admissions, 1118
aptitude tests, 348
attitude on war, 2972
biological status, 1135
boys, association, 4768
class, clinic demonstration, 4820
size, 2602
and experience, 4801
counseling, 1152
education, California, 362
viewpoints, 4812
Entrance Examination Board examinations, value, 349
extension, intelligence, 3596
freshmen, reading training, 4006
honesty, 4062
attitude, 1139, 3570
honor system, 4864
individual vs. group study, 3575
treatment, 1130
intelligence tests, 4196
marking, sex bias, 2634

mental hygiene, 1108, 4153, 4799
parent education and, 1138
physics and mathematics, 2632
probationers, outlook, 1144
scholarship, 3583
religion and, 1155
remedial teaching, 4840
repeaters, 4807
scholarship and activities, 2637
high school credits and, 3060
prediction, 1583, 3070
students, 2600
senior, educational preferences, 2104
student, negro, 2103
reading, 6066
rate, 2613
selection, 2127
success and age, 3062
prediction, 4111, 4160, 4818, 6073
teacher, 2140, 4798
efficiency, 4140
intelligence tests, 1579
vs. liberal arts, 2125
personnel service, 2146
testing, 5560
Kentucky, 2599
methods, 4852
transfer of training, 3568
vocabulary test, 5565
vocational interest, 4719
selectivity, 6095
withdrawal, 1597
woman, fertility, 1850
leadership, 701
(See also *Dean, Education, Student*)
Colon and neurosis, 4580
Color, 33
in advertisement, 2984
after-image, 1219, 1220
and contrast, 3637
apparatus, 5581
association, 4029
blindness, 41
case, 2733
heredity, 3627
race difference, 3454
rat, 2797
sex chromosome and, 2831
chronaxy and, 3728
complementary, 438
constancy, 428
illumination and, 1714
contrast and form, 4263
increasing, 1227
difference limen, 401
discrimination, child, 2562
effect, 1245
on reading speed, 4708
field, 3666
field size and, 3676
form abstraction and, 2723, 2724
form, transparency, 2211
form in trichromatism and, 3138
in Homer, 819
illumination and, 1706
legibility of lettering and, 4705
print, 3461
memory, 2707
mixer, 393
preference, child, 4755, 6032
sex difference, 3178
students, 5648
of print and reading speed, 3472
protective, and Gestalt, 436
reaction time, 1705
reflex to, 3741
response, infant, 1110
sensation, latency, 2232
sense, insect, 3305
personality and, 3642
in periphery, 1708
theory, 1699
transformed, contrast effect, 5641
vision, 35, 2228, 2233, 3623, 4282, 4294
bee, 4446
in cerebellar lesion, 5614
chicken, 526
fields, 50
leech, 4469
moth, 4441
parrakeet, 3269
peripheral, 2714
personality and, 2218
planaria, 532
rat, 1335, 4468
test, 3665
in vocational guidance, 1698
Combat, reaction time, 1761
Community as behaviors of individuals, 1489
Companionship, child, 4055
(See also *Association*)
Comparison, 2217
Compensation and crime, 589
neurosis, 5864
Competition for marks, 4808
Completion test, English, 4099
Complex, erotic, 167
Composer, popularity, 5962
Composition drill, 2655
preference, high school, 2107
teaching, 2614
Compositor, myopia, 1696
Comprehension, psychology, 4230
of reading material, 4006
of words, dog, 899, 3296
Compulsion, 995
in hypophrenia, 3941
(See also *Obsession*)
Computation, age, 2102
apparatus, 1158
punch cards, 1162
Computer, selection, 2547
Concept, 68
child, 3524
formation, 486
child, 3548
instruction and, 475
rat, 1812
growth in child, 3016
learning, negative instances, 5654
relations, child, 3538
(See also *Thought*)
Concussion of cord, 3714
delayed, 4534
Conditioning, 1845, 4385, 4386, 4387, 5698
animal, review, 5744
apparatus, 2692
to benzene poisoning, 3735
bilateral transfer, 871
bile secretion, 3240
castration and, dog, 3732
changes, 3265
child, 3555, 5696
demonstration, 861
differentiation, 859, 4413
diuresis, 1766
experiment pattern effect, 2790
extinction rate, 4412
factors, 1314
food excitability in, 3263
hypnosis and, 918
idiot, 622
immunity, 2271
induced inhibition, 1322
during inhibition, 4420
interval in, 525
load and, 5713
methods, 3748
mode of presentation and, 3244
negative, 2779, 3255, 4392
plantar reflex, 881
rate, 1319
reflex, pupillary, 797
reinforcement, 3264
inhibition and, 4378
respiration, 5701
reward to pain in, 5706
rise in agglutinins, 507
to sound relation, 5708
strength of stimulus and, 4407
technical details, 2791
time relations, 4383, 4400, 4402
near threshold, 1783
thyroid and, 1298
transfer, 4409
types, 4355
in vasectomized dog, 3733
visual, in birds, 3768
voice pitch, 4414
volition and, 4379
(See also *Learning*)
Conduct, boy scout, 1542
disorder, child, 2563
religion and, 1073
Conduction deafness, 3674
decrement, 3202, 5676
fatigue and, 5730
peripheral nerve, 2756
of sound by bone, 5640
Cone function, 3682
vs. rod composition, 4299
Configuration in learning, fish, 2306
(See also *Gestalt*)
Conflict of culture, 256
forms and psychotherapy, 2442
of habit, rat, 541
nature, 158
types, 5780
Confusion from shock, 4604
Congressmen, legislative ability, 1476
Conscience, child, 317
in neurosis, 971
(See also *Super-ego*)
Consciousness, 15, 788, 1207, 2694, 3351, 4228, 5571, 5572
dimensions, 2168
ejective, 277
language and, 5968
narrowness, 5629
restriction, 104
theory, 399
Constancy phenomenon, 2196
Constitution, 2828, 3324, 3827
ability and, girls, 327
abnormality and, 4789
audition and, 4265
in crime, 4008
degeneration and, 614
drug reaction and, 4572
in epilepsy, 1950
in psychiatry, 3950
review, 2321
in schizophrenia, 4606
types, women, 4384
vocation and, 2037
(See also *Body type*)
Consumer preference for container shape, 4723
Consumption, determinants, 4732
family, 1052
psychology, 1524
Container shape, preference, 4723
Contingency method, 4881
Contraception, see *Birth control*
Contrast, color, and form, 4263
increasing, 1227
in colored light, 3637
effect, transformed colors, 5641
Gestalt and, 2221, 3643
illusion, 4291
retinal, 1693
simultaneous, 1229
field illumination and, 1231
successive, 428
tonal, 5633
Control key, 395
social, by cartoon, 4672
Controversy in occultism, 3858
Convergence, 1246
Conversion, morbid, 1074
in prison psychosis, 1440
retinal, 3639
sensory, 4261
Convict, moral judgment, 3452
Convulsion, 639
child, 3411
stimuli to cortex, 487
Coordination and chronaxy, 3721
eye dominance and, 515
intelligence and, 2777
measurement, 5599
mechanisms, cord, 4346
reading, 2725
warming-up effect, 4411
(See also *Dexterity*)
Copying errors, 4156
Cornea, chick, development, 1336
reflex and nystagmus, 2780
Corpus luteum and maternal behavior, 4364
Cord concussion, 3714
coordinating mechanisms, 4346
dogfish and equilibrium, 2821
injuries, 3386
lesion and maze learning, rat, 540
nerve terminals, 849
psychism, 4342
regeneration, fish, 2815
transection, cat, 113
(See also *Nerve*)
Correlation, 4164, 4874
analysis, 2661
between averages, 6114
biserial, 4884

coefficient, combination, 3083
distribution, 1160, 1622
meaning, 3080
part, 1163
as common elements, 1617
computation, 1159, 1161
chart, 3089
criterion, standard error, 3082
form, 1169
index, 1168
interpretation, 4168
multiple, 1624, 4879
computation, 4875
partial, 1616
ratio, distribution, 1628
of sums, 6115
surface, 1167
three variables, 1626
Cortex areas, rabbit, 5746
chronaxy and, 4396
excitability, 4386, 4387
function, 3715
growth, 4347
labyrinth and, 667, 3214
laminar distruction, 4339
motor, cat, 2818
chronaxy and, 1735
vs. nerve, action current, 1734
optic, electric response, 1271
strychnine and, 1269
representation of vision, 5675
response to optic nerve stimulation, 1270
salt effect on, dog, 5682
stimulation, 5662
by convulsants, 487
vascular reflexes and, 5667
viscera and, 4359
Cortin effects, 4376
energy output and, 1328
function, 2776
therapy, psychosis, 2413
Cosmetics and psychology, 2855
Counseling, student, 1152
Counting of monkey, 4438
Country child, religion, 252
city vs., 5913
retarded child in, 6053
Court, juvenile, statistics, 4646
psychologist, 3473
Courtship changes, 1022
Crab, nerve excitability, 3772
Cranium, see *Skull*
Creativity, 1051
esthetic appreciation and, 4835
Crime, 1987, 1988, 2017, 2018
act vs. criminal in, 221
adolescence, 3478
Algeria, 2517
amnesia and, 3990
biology of, 2536
case study, 5941
cause, 1045, 1076
certainty of justice and, 239
classification, 694
compensation and, 589
constitution in, 4008
discouragement in, 1067
dynamics, 4677
endocrines and, 3438
etiology, 3443
factors, 1442
handwriting and, 2528
Holland, 1007
hypophrenia and, 4623
intelligence and, 4655
mercenary, 2506
negro, 1021
neurosis and, 1016
paranoia and, 1973
personality and, 1989
prevention, 1065, 1475
psychiatry and, 711, 1069, 1504, 5930
psychoanalysis and, 1006
psychology and, 2026
psychopathy and, 1454
psychosis and, 1500, 4578
psychotherapy and, 1983
punishment and, 1048
religion and, 1057
religiosity and, 2463
sex, 702, 1012
infantilism and, 1969
sex and, 1999
study, 703, 3469, 3479, 4697, 5953
demonstrations, 244
methods, 5982
prison, 1071
suspect, detention, 1466
tendency in law, 1457
treatment, 238, 1032, 1034, 1050, 3982
Mexico, 1055
trends, 1505
twins, 3314
(See also *Convict, Court, Delinquency, Judge, Law, Prison, Probation, Punishment, Recidivism, Theft*)
Criminal, classification, 257
reproduction, 5772
sex, handwriting, 687
social attitude, 2488
study of, 704
types, 5973
writings of, 228
Criminality, and hypophrenia, 1509
Russia, 1482
Criterion, fallible, validation against, 4160
Criticism in attitude, 4318
literary, 691
Critique, localization, 1289
Cross-education, 346, 3738
Crowd mind and hysteria, 5893
psychology, 254
(See also *Group, Social*)
Crustacea, action current, 5741
claw response, 500
eye, 3272
nerve, heat production, 5660
(See also *Daphnia*)
Crying during test, infant, 1535
Crystallization, charges in, 3217
Culture, 3984
acquisition, 2975
art sequence and, 5974
change, 4688
conflict, 256
Eskimo, 1062
level and intelligence, 3481
neurosis and, 601
psychoanalysis and, 2478
rhythms, 4013
science of, 2960
Curare action, theory, 5824
Curator, selection, 299
Current amplifier, 2191
constancy, 9
Curriculum revision, 1119
social science, 6101
Curve fitting machine, 4878
Custom, Bantu, 719
belief and, 716
Customer attitude, 3511
Cutaneous, see *Skin*
Cutting test, 4906
Cyclothymia, 2871, 2908, 4583, 5848, 5890
birth order, 5841
heredity, 5892
phobia in, 2879
precipitating factors, 5845, 5908
prognosis, 5901
psychotherapy, 211
regression, 5910
terminal state, 626
Cynicism, 3319, 3811

Dalton plan, 3069
Daphnia, phototropism, 1842, 4435
temperature effects, 1337
tropism and strychnine, 528
Data, photographic reproduction, 5578
Deaf blind, bone conduction, 4831
mute, 4287
memory, 4325
vocational efficiency, 282
mutism, 3148
Deafness, causes, 1690
child, 3027
conduction, 3674
development in, 727
education, 1225
emotional expression and, 3522
heredity, 3167
history, 1248
hysterical, 1951
lip reading in, 1041
meningitis and, 814
motor ability in, 1701
mucosal adrenalin reaction in, 1237
mumps and, 4571
nystagmus in, 878
partial, 1217
personality in, 1908
school child, 2129
speech audition in, 811
training, 1228
vocational, 5634
Dean of women, 3557
Death, 1869
attitudes, 3881
by current, 3875
instinct and anxiety, 137
subjective significance, 3816
(See also *Burial, Mortality*)
Decalogue, attitude toward, 4703
Deception, detection, 1721
Defense and jealousy, 2860
reflexes, 2768
Deficiency, motor, 4367
Definition test, 4907
Defoe romance, psychology, 223
Deformity, mental hygiene in, 2991
Degeneration and constitution, 614
Delayed alternation, raccoon, 5731
reaction, monkey, 5754
Delinquency, 255
abnormal, classification, 4635
abnormality and, 1562
adolescent, 2587
areas, 2974
attitudes, 4777
body type in, 717
child, 1089, 1965, 2013, 2016, 2028, 3434, 3540, 4076
care, 1541, 1559
and economics, 2970
Russia, 2965
classification, 1977, 2018
congenital, 5963
economics and, 1044
education and, 1042, 1507, 2644, 4116, 4125
family attitudes and, 740
factors, 3460, 3471
girl, 1019
grade placement, 4110
immigration and, 5914, 5915
intelligence and, 1981, 2509
interests, 1497
late, 4523
measurement, 260
national differences, 3444
negro boy, 1974
neurosis and, 4746
New York, trends, 2507
observations in, 4702
Porteus test in, 3993
prevention, 1534, 2468
psychopathy and, 273, 3996
psychosis and, 658
school achievement in, 312
testimony, 3474
transference in, 2465
violence, 1495
vocational guidance in, 1990
(See also *Crime, Reformatory, Truancy*)
Delirium, alcoholic, 4577
tremens, hallucination, 1945
Delusion, 3899
child, 3528
encephalitis and, 4554
grandeur, 4500
induced, 1394
interpretation, 644
misidentification, 4543
paranoid, 968
paresis, 675
malaria therapy and, 3426
persecutory, 191, 3373
localized, 4542
psychosis, 4588
reference, 192
schizophrenic, 3423
sublimation and, 169
types, 4522
Dementia and CO poisoning, child, 5867
epilepsy and, 5872
menopause, 5871
senile, 1435
Demonstration, bases, 1667
Dentist test, 4035
Dentistry aptitude, 4737
psychoanalysis and, 2352
psychotechnics of, 2989
Dependability, 2154
Dependency and intelligence variation, 3015

Depersonalization, 4550
encephalitis and, 3388
Depression, 991
family relief and, 1013
introjection in, 2852
involutional, 207
mental hygiene and, 4629
states, Goethe, 4552
Depressor, muscle extract, 5699
Depth perception, 448, 1246, 1700, 3653, 3657
child, 741
horopter, 1215
(See also *Stereoscopy*)
Derision, 577
Design test, 4668
Desire, 3341
Deterioration, mental, and cerebral fluid, 5860
Determinant solutions, 3090
Determinism, 1646
Development, adolescence, 1560
test, child, 5562
(See also *Growth*)
Dewey, attitude on education, 2149
on habit, 6056
Dexterity, poor, personality in, 1293
test, 510
(See also *Coordination*)
Diabetes psychosis, 4619
Dialect atlas, 3459
consciousness, 2496
Dictation errors, 4156
Dielectrolysis, 3363, 3888
Diencephalon, opossum, 1810
Diet and bone, rat, 3797
child, 4081
and maze learning, rat, 1836
neurosis and, 1939
oestrus and rat, 543
(See also *Food*)
Difference, error, 365
matched groups, 366
between means, 2155
Differences, individual, 6082
practice and, 91
Difficulty, test item, 1166, 4179
Digestion motility and anoxemia, 1297
nerve control, 1738
neurosis, 1925
worry and, 5646
Digging of larva, 3769
Dimensions, consciousness, 2168
Diopter, calculation, 3669
Diphtheria sequelae, 4630
Direction tendency, rat, 4430
(See also *Orientation*)
Directory, clinic, 216, 2435
Disability, mathematics, 757
Discipline, school, 1600
Discontent, American, 1018
Discrimination, form, rat, 534
lights, rat, 5732
movement, rat, 5733
sensory, 3285
time, rat, 2307
tone intervals, 5961
visual, dog, 1332
Disease and dream, 578
optic nerve, 4557
psychosis and, 184
Disgust, 1720
dog, 1829
Dissertation abstracts, social work, 1439
education, 2119
Dissociation, 4566
personality, 162
Distance and attractiveness of objects, child, 2999
Distraction, 835, 2247
child, 3544
Distribution of practice, pursuitmeter, 4425
(See also *Whole*)
Diuresis, alcohol, 5717
conditioning, 1766
Divination, 2358
Divorce, adjustment after, 1060
child and, 4751
law, 1049
marriage and, 1077
rate, opinion on, 2490
(See also *Marriage*)
Doctorate, psychology, 798
Wundt's students, 2172
science, 5667
Dog, bromide effects, 4451, 4452, 4470
calculating, 5753
cannibalism, 1816
castration and conditioning, 3732
emotion, 1829
fatigue, 4366
inhibition removal, 4447
bromide, 4448
larynx reflex, 1326
neurosis, 4450
paraplegic, flexor reflex, 1769
pattern discrimination, 1332
salt effects on cortex, 5682
sound localization, 115
training, 4467
understanding of words, 2308, 3296
vasectomy and conditioning, 3733
vitamin D effect, 890
word comprehension, 899
work capacity factors, 5697
Dogfish, cord and equilibrium, 2821
Dominance, behavior, 186
eye, and coordination, 515
foot, 883
lateral, and visual fusion, 2787
ratio, 2830
unilateral, 2767
(See also *Eyedness, Handedness, Laterality*)
Domination, bird, 1804
child, 6035
Dorsal root fibers in tract of Lissauer, 1748
Dove, labyrinth removal, 5735
and vestibular reaction, 5736
Downey, J. E., obituary, 1213
Pressey test vs., 4899
Dowsing, 1909
Drama, appeal, 4038
attitudes and, 2030
psychoanalysis and, 5805
(See also *Theater*)
Dramatics, therapeutic value, 3407
Drawing ability, heredity, 126
Mexican child, 4067
analysis, 1904, 2976
child, 2084, 2086, 3019, 4794, 6025
of dream, 2567
principles, 2065
development, 3985
eidetic imagery and, 328
mechanical, reading of, 5998
scale, 5943
test, 2044
of intelligence, validity, 4193
twins, 1351
Dream, 586, 2371, 4512
analysis, 163, 1904, 1937, 1944
child, 2567, 3039, 6028
content and wish, 1897
disease and, 578
ego in, 2342
forgetting, 135
Indian, 2958
interpretation, 1198, 1383, 2381, 2867, 3835
Hebrews, 3352
precognitive, 4481
research methods, 136
significance, 587
stimuli, 139
symbols, 172
theory, 3822
treatment, 3337
variation, 1886
(See also *Nightmare, Psychoanalysis*)
Dress, 2483
(See also *Clothing*)
Drill, English, 2655
reading, 3566
Drive, 552, 553
animal, 1819
sex, 2375
strength, rat, 1843
(See also *Impulse, Motive*)
Driver, examination, 3510
(See also *Chauffeur*)
Driving and alcohol, 293, 1371
right- vs. left-side, 2050
sleep risk in, 1079
Drug addiction, 572, 914, 919, 2378, 2851, 2853, 3871, 4510
psychoanalysis, 3345, 5799
sex and, 1889
effects, alcohol, 935
caffein, 929
fatigue and, 2781
heart ganglion cells, 3210
labyrinth reflexes, 887
nerve, 5671
psychosis and, 618
rat, 2793
maze behavior, 1825
recreasl, 1528, 5818
rotation response, 2786
reaction and constitution, 4572
ritual, 580
(See also *Adenine, Adrenalin, Alcohol, Bromide, Bulbocapnin, Caffein, CO, Cholin, Cortin, Curare, Ergotism, Ether, Heroin, Histamin, Insulin, Intoxication, Mescalin, Narcosis, Nembutal, Pilocarpine, Poisoning, Recresal, Strychnine, Veratrine, Veronal*)
Duration and intensity, sound, 5621
limen, touch, 3155
Dysarthria, 1434
Dyskinesia from birth injury, 4551
Dysmenorrhea, 4603
Dyspareunia, analysis, 1383

Ear defect and encephalitis, 1409
disease and scarlet fever, 803
physiology, 2214
(See also *Otitis, Audition*)
Earthquake, reactions to, 938
Earthworm, brain regeneration, 5739
nerve impulses, 5668
Eating habits and personality, young child, 4753
(See also *Food*)
Ecology, plant, 889
social, 713, 2008
Economic system and mental hygiene, 4638
Economics, 4716
child delinquency and, 2970
delinquency and, 1044
emotion in, 4020
eugenics in, 5767
primitive, 4003
psychopathology and, 686, 1458
psychosis and, 5862
Eczema, psychogenic, 4614
sensitivity in, 4632
Education, 2648, 4824, 6059, 6082
abuses, 359
activity in, 1575
administration in, 3059
aims, 3577, 4134
anthropology and, 4119
audition defect in, 805
character, 1548, 2874, 6086, 1134
charitable, 3559
child, 2591
China, 2116, 3578
cinema in, 6096
classroom management, 3560
coercion in, 1600
comparative, 3057
compulsory, Russia, 3066
computation devices, 1147
costs, 2621
creative, 2120, 4826
crippled child, 3056
critique, 2646
deaf adult, 1225
child, 3027
delinquency and, 1042, 1507, 2644, 4116, 4125
Dewey influence, 2149
theory, 6067
diagnosis, 6057
disability and emotions, 2560
doctorate theses, 2119
dynamics, 2654
experimental, 4865
journal, 1117
for family life, 1132
gifted child, 3051, 4905, 6080, 6084
higher, California, 362
viewpoints, 4812
home vs. school, 3071
hypophrenia, 355, 1936, 2404, 2405, 2414, 2625, 2645, 2658, 3041, 3889, 4131, 4138, 4151, 4531
initiative and, 2101
intelligence, occupation, 3506
international, 353
Italy, 4102
Japan, 2106, 2144
kindergarten-primary, 4834
laboratory, Cluj, 4225
leaders, geographic distribution, 1602
measurement test, 1595

mental hygiene and, 1580, 3918, 6093
methods, 3579
Montessori, 4142
music, 5958
preschool age, 6110
negro attitude and, 1979
newer methods, 3563
parent, 733, 1131, 2111, 4086
college and, 1138
periodical, 4817
personnel in, 1594
philosophy of, 1536, 4104
Rousseau, 1606
physical, 759
mental hygiene and, 3905
psychosis and, 3904
position change, 3508
training for, 765
preference, seniors, 2104
preschool, parent and, 4823
Russia, 3065
principles, 1588, 4127, 4147
prison, 227
progressive, 1123, 3565, 6055, 6085
mental hygiene and, 1128
propaganda and, 2099
psychiatry and, 997, 2596, 2887, 4135
psychoanalysis and, 2138, 2611, 3580
psychology, 2122, 2182, 2623, 2638, 2653, 4100, 4133, 4137
bibliography, 6064
counselors, 4150
objectives, 4108
textbook, 420, 6079, 6099
workbook, 1590
reformatory, 2952
religion and, 1155, 2539
remedial, 673, 748
research, 1585, 2618, 2657, 3044, 4107, 4869
Australia, 1124
standardization, 4144
review, 4830
Russia, 2595
secondary, 1141
semi-blind child, 3055
sex, 308, 762, 2020, 4057, 4853
child, 4087
sick child, 3576
social, child, 4113
sociology of, 3079
special, 1581, 2123, 2597, 3077
Spranger, 6092
status, 1149
success and, woman, 6107
survey, 4123
teacher, bibliography, 4804
preparation, 1151
test, review, 6077
textbook, 6063
therapeutic, 2449
theses, 4800
unconscious and, 1596
unemployed and, 2131
visual, in hypophrenia, 2642
vocational, 3072, 4802
whole learning in, 1153
will, 1776
young child, England, 2634
youth, problem in, 3533
(See also *College, Coeducation, Curriculum, Dalton, High school, Instruction, Kindergarten, Nursery, Progressive, School*)
Effect, law of, 1793, 3182, 3188, 4375, 4415
Efficiency, alternation of tasks and, 4726
fatigue and, 3236
illumination and, 4721
mood and, 3500
neuroticism and, 1086
vocational guidance, 4103
work conditions and, 6006
Effort and interest, 620
motor, 5709
(See also *Work*)
Ego development, 915
in dreams, 2342
systems and, 4247
Eidetic imagery and drawing, 328
mirror projection, 1265
psychosis and, 1431, 1952
subjects, 68
suggestibility and, 5787
time sense and, 816
type and, 67
Elberfeld horses, 5737
Electric anesthesia, 3156
reaction, ameba, 537
sensitivity and body size, 3160
stimulation, sensation, 430
Electricity and plant sleep, 1828
sensitivity, rat, 2305
tolerance, 4391
Electrocution, 3875
Electrode, 390, 394
Embryo behavior, bird, 542
reflex in, 895
(See also *Fetus*)
Embryology, primate, 2814
Emerson vs. Freud, 3829
Emigration, 3283
psychosis and, 656
Emotion, 2239, 2739, 2741, 4303
adjustment, child, 1103
adrenalin and, 52, 55, 616
attitude, 56
blood change in, 1249
brain mechanism, 1719
chronaxy and, 2285
development, child, 3517
dog, 1829
education disability and, 2560
effects on acidity, gastric, 99
esthetic, eye movement in, 3687
excitability in, 3176
expression, blind-deaf child, 3522
facial expression of, 2740
feeling and, 829
galvanic reflex and, 3690
glycosuria, Chinese student, 3729
inhibition on learning and, 313
intelligence and introversion and, 464
interpretation, 831
measurement, 3177
mechanism, 58
memory disturbances and, 2407
nature, 51, 3172
psychoanalysis and, 2325
psychosis and, metabolism in, 1438
pupillary reaction and, 43
regression, tests, 5898
steadiness and, 374
stimuli, child, 2096
terminology, 1250
test, sex difference, 4301
theory, 4304
training, 1107
words, memory for, 838
(See also *Affect, Fear, Feeling*)
Employee attitudes, 4725
Employment test, 5989
(See also *Wage*)
Encephalitis, 2445, 3379, 4583, 4593
alcoholism and, 2919
care, Germany, 1938
case, 4545, 4574
delusion and, 4554, 4556
depersonalization and, 3388
ear defects and, 1409
epidemic resembling, 4585
hallucination and, 970, 2399, 3932
hysteria and, 179
impulse in, 3360
Korsakov syndrome and, 619
language disturbance, 4505
oculogyric crisis in, 655
psychosis after, 4624
schizophrenia and, 2395, 3375
sequelae, 180, 2447, 3370, 3956, 4573, 5868, 5869
White Russia, 4539
(See also *Parkinsonism*)
Endocrine, 3745
activity and, rat, 2812
crime and, 3438
disorder, diagnosis, 2283
homosexuality and, 3334
neurosis and, 1941
pituitary, 4403
psychosis and, 969, 2900, 4538
child, 4633
rat, 2760
sex and, 2280, 2326
singer, 2007
(See also *Corpus luteum, Giantism, Hormone, Parathyroid, Pituitary, Thyroid*)
Energism, 3118
Energy cost, cortin and, 1328
marching, 4727
marksmanship, 2051
muscle length and, 3237, 3243
and practice, mental work, 483
work and, 1789
mind and, 4223, 4249
transformation, 4244
Engineering aptitude prediction, 4722
test, 3487
motives, 2060
scholarship prediction, 4155
English composition, 2614
grading, 4136
curriculum, 2620, 6089
drill, 2655
errors, 6104
and French, Canada, 4674
placement test, 6103
remedial, student, 753
scholarship factors, 3567
teaching, 4832
test, 361, 2636, 2639, 2650, 2652
completion, 4099
word elimination, 6105
(See also *Capitalisation, Composition, Grammar, Literature, Prose, Punctuation, Sentence, Spelling*)
Ennui in patients, 3913
Entelechy, 1676
Entropy concept, 5604
Enuresis, 6038
Environment, crime, 3443
heredity and, 1801, 6020
intelligence and, 4898
language and, child, 6030
personality and, 4213, 4515
psychosis and, 5892
scholarship and, 6071
will and, 2364
Envy, child, 6050
social role, 3346
Epilepsy, 639, 671, 4631
acid-base equilibrium in, 201
aphasia in, 3931
autonomic in, 2436, 2437
brain surgery in, 4591
character in, 3380
changes, 2888
child, 175, 1432
alcohol effects, 4488
constitution in, 1950
dementia and, 5872
forms, 3421
heredity in, 3392, 5765
hyperinsulinism and, 4569
Jews, 3930
marriage and, 3307
negro, 645
paranoia and, 2872, 5879
pathogenesis, 3414
psychoanalysis and, 2421
reflex in, 4553
changes in, 654
schizophrenia and, 2397, 3384
sympathetic in, 3424
traumatic, 5878
twins, 5773
work ability and, 1931
Epistemology and psychoanalysis, 13
(See also *Knowledge*)
Equation, personal, in ratings, 2158, 2159
Equilibrium, 2281
cord and, dogfish, 2821
disturbance, 3374
frontal lobe and, 3707
minnow, 4444
Equivalent stimuli, method, 3285
Ergograph, finger, 1668
recovery on, 3760
Ergotism, mental disturbances, 5852
Error, anticipation, rat, 4457
arithmetic, 1120
capitalization, 3573
cognition, 1724
copying and dictation, 4156
difference, 365
intercorrelation, 3082
matched groups, 4161
reading numbers, 296
significance, 1879
sources, 2479
tetrad, 1623
Erotism, anal, 156
Erotomania, 4565
Erythrophobia, psychoanalysis of, 5829, 5834
Eskimo culture, 1062
life, 4687

Esthesiometer, differential, 5577
Esthetic appreciation and creative work, 4835
emotion, eye movement in, 3687
Esthetics, 2977, 3447, 5956
Gestalt and, 4010
Proust and, 4017
vision and, 2238
(See also *Art, Beauty*)
Estimation, visual, 2197, 2209
field, 2198
Ether and sympathetic, 5661
Ethics, 708
biology, 4678
child, 324, 743, 1563
concepts, boy, 3333
defective sense, 628
Kant, 684
primitive, 1459
relativity in, 2979
sex, 1997, 2500
Ethnography of schizophrenia, 3400
Ethnology and psychoanalysis, 3458
Ethylism, 3947
Eugenics, 901, 903, 1853, 3313
economics and, 5767
hypophrenia and, 3364
mental hygiene and, 2909
psychiatry and, 5896
psychosis and, 5840
status, 5755, 5756
sterilization, 1849, 1852
Evolution, brain, 1746
mind, 1854
by selection, 3316
society, 1469
teratology and, 5
Examination anxiety, 3810
education and, 767
uses, 4157
Excitability, 1277
without conditioning, 3262
cortex, 4386, 4387
electric, muscle, 3239
emotion, 3176
measurement, 1274
nerve, crab, 3772
and muscle, 1751, 1752, 3713
optic pathway, rabbit, 1273
personality, 2418
testing, nerve, 3763
Excitation, all-or-none law, 3208, 3717
antagonistic, 3711
contralateral extension, 5679
muscle, direct vs. indirect, 3753
nerve, 1275, 4350
-muscle unit, 5673
spread, 5698
stimulation and, 3767
sympathetic and, 4361
(See also *Inhibition, Irradiation, Irritability, Habit*)
Excitement, pulse frequency in, 4373
Executive ability, 4041
tests, 4724
Exercise and blood content, 4421
effect on child, 880
leucocytosis in, 1778
mental, of Jesuits, 278
pain in, 1307
Exhibitionism, 641, 974, 1357
Expedition, Asia, 5951
Experience in education, 1153
form perception and, 2730
thought vs., 241
Experiment in psychology, 412, 3114, 3123, 3125, 4227
Expert opinion, contradictory, 2472
effect, 4686
Explanation, 5653
nature, 2686
Expression in adolescence, 4773
of affect, 158
in blind, 4269
child, 4776
in movement, 3730
posture and, 1306
recognition, 465, 466
science of, 2331
theory, 5921
Expressionism in art, 2356
Extension intelligence, 3596
Extensity, as dimension, 2168
Extinction, experimental, 856
by novelty, 857
rate, 4412
Extrapyramidal system, 2751
Extremism in art, 2944
Extroversion, see *Introversion*
Eye affection, choked disk, 624
anatomy, 48
ant, 3798
cat, pupil stimulation, 3303
chronaxy in special states, 1291
compound, 3664
Crustacea, 3272
defect, 315
twins, 1717
disturbance, psychogenic, 2441
dominance, 504
child, 4793
coordination and, 515
infant, 338
effects of close work, 1691
fatigue, 440, 3650, 3652
glowing, 3663
hand preference and, 3749
illumination, rabbit, 2807
incoordination, reading
light effects, 1221
Limulus, nerve response, 2805
movement, 4006
counts, validity, 824
in esthetic emotion, 3687
localization in, 1244
reading and, 2769
vs. recall, 4370
stutterers, 3991
recorder, 1212
rotation and, fish, 5748
visual imagery and, 2208
(See also *Nystagmus*)
muscle defect, 3647
imbalances, 802
nystagmus and, 885
reflexes, 514
nerve, disease, 4557
pathology, 3678
preference, 3235
pressure, 1247
reflex, 1782
refraction measurement, 3648
rotation center, 4292
structure, *Sphenodon*, 1827
treatment, 3646, 3656
variation, triton, 1833
(See also *Cornea, Iris, Fovea, Nictitation, Optic, Pupil, Purple, Retina, Vision, Wink*)
Eyedness and handedness, child, 6044
(See also *Dominance*)
Eyelid contraction, 4401
movement, control, 40
reflex, reinforcement and inhibition, 4378
response, reflex vs. voluntary, 855, 5728

Face expression, blind, 4269
emotions, 2740
head form vs., 1311
muscle tone, 1318
reflexes, 5692
spasm, 631
Facilitation by suggestion, 3335
Factor, character, 2842
theorem, converse, 1608
theory, 382, 2157, 3081, 3085, 3087, 4173, 4184, 4190, 4208, 5569, 6128
chicken learning, 3774
multiple, 3091
school subjects, 4867
test, 5561
Faculty, 1670
Failure and success feelings, 53
Fairy tales for children, 3037
Familiarity and association, 3183
feeling, 3332
Family, 1467, 2510
abnormal, and child, 3536
in adolescence, 1100
American, 2036
attitude toward psychosis, 945
delinquency and, 740
bereavement, 1027
bibliography, 1498
child and, 1106, 6016
neglect, 1549
consumption, 1052
early American, 1020
education for, 1132
European heritage, 1056
factors in delinquency, 3460, 3471
in fowls, 3770
girl and, 2583
guidance, 1017
harmony and child adjustment, 2938
illusions, 5790
limitation, concomitants, 5932
mental hygiene, 1483
negro, 1985
neurotic, 2401
nineteenth century, 1035
vs. occupation, woman, 1015
primitive, 1053
psychosis in, 5774
relations, 1068, 2457
relief and depression, 1013
remedial agencies, 1023
resemblance, personality, 124
romance in music, 5804
similarity, occupation, 3584
size and type, 1061
social change and, 1031
survey, 3987
of welfare girls, 3530
(See also *Adoption, Child, Home, Marriage, Monogamy, Parent*)
Fantasy, 1362, 3809, 3826
adolescence, 1547
heredity, 5760
play and, child, 332
playmate, child, 2571
production, child, 6033
research methods, 157
Fascism, philosophy, 2493
Fatigue, 3744, 4311, 4366, 4398
chronaxy in, 1291, 3739
conduction and, 5730
drug effect on, 2781
elimination by, 1528
efficiency and, 3236
eye, 440
gastric secretion and, 1302
inanition and, 4406
indices, 870
in industry, 1518
inhibition and, 3247, 3246, 3266
mental, Mexicans, 4114
muscle, 1309
caffeine and, 502
in neurasthenia, 5883
ocular, 3650, 3652
persistence, 3742
symptoms, 3231
in tests, 4197
transfer, 862
tremor and, 864
vocal, 1494
(See also *Work*)
Fear, 4302
child, 4056
in play, 1546
reaction time, 292
(See also *Phobia*)
Feast, primitive, 2966
Fechner, *Massformel*, 804
Fecundity and age, 901
Feeble-mindedness, see *Hypophrenia*
Feeding, rat, social facilitation, 1817
Feeling, 1252, 1722, 2240, 5645
emotion and, 829
indifference, 5644
memory and, 4327
modification in illness, 1429
national differences, 745
tone, adjectives, 3175
(See also *Emotion, Sentiment*)
Ferenczi, S., obituary, 5823
Fertility and birth control, 192
black vs. mulatto, 4665
college vs. non-college, 1850
differential, 1344, 1347, 1353, 4477
race difference, 1861
early man, 2835
intelligence and, 1855, 2829, 3311
(See also *Birth*)
Festschrift, Benedek, 3619
Fetish, case, 1943
Fetishism, 4519
(See also *Obeah, Voodoo*)
Fetus, behavior, 5664
differentiation, 6027
rat, 2804
mass activity, 3007
(See also *Embryo*)
Fiction, child in, 3541

Field and brightness, 1707
color, 50, 3666
defects, visual, 5639
form, 432
size and color, 3676
visual, estimation, 2198
Filipino attitude, 2963
toward America, 4689
Fire myth, 149, 2843, 2847
Fish ampulla, 2794
audition, 3299, 3778
behavior, bibliography, 549
cerebellum, 5749
cord regeneration, 2815
eye movements under rotation, 5748
gustation, 3287
iris, 3686
lateral line, 3783, 3784
light and pigment change, 3291
medulla, 891
nerve impulse, 3284
pressure sensitivity, 1807
retina, 5623
sensitivity, 559
swim bladder, 1834, 1835
(See also *Catfish, Dogfish, Goldfish, Minnow, Shark, Sunfish*)
Flagellantism, 268
Flexor reflex in paraplegia, 1769
Flicker apparatus, 5574
Flight of ideas, 5842
Fluctuation, work, 4317
Fly, gustation, 3277, 3792
Folk character, 1503
-lore, 2945
(See also *Myth*)
Food behavior, cat, 4433
excitability, dog, 3263
habits and personality, young child, 4753
intake, 3242
preference, 2287
rat, 1848, 2295, 2316
temperature, infant, 4059
(See also *Diet, Eating, Feeding*)
Foot preference, 883, 3235
Forgetting, 66, 1728, 4316
curve, 1266
of dreams, 135
of instructions, 59
rate, 60
(See also *Retention*)
Form board, 4194
performance, child, 1564
building test, 775
color abstraction and, 2723, 2724
contrast and, 4263
transparency and, 2211
in trichromatism and, 3138
comprehension, child, 320
discrimination, chimpanzee vs. child, 2802, 2803
rat, 534, 1812
field, 432
visual, 3142
perception, 49, 2212
experience and, 2730
visual, 2704
preference, child, 6032
problem, 4284
reproduction, child, 3006
size perception and, 5630
Foster mother, success, 1544
parents, 1553
Fovea, sensitivity, 434
Fowl, beri-beri, 2796
family, 3770
gland modification of instinct, 4363
France, ecological studies, 4658
French and English in Canada, 4674
Frequency of sounds, 3679
changes, tones, 2215
curve transformation, 3086
Freud vs. Adler, 3955
Emerson vs., 3829
estimate, 154, 5832
75th birthday, 3621
(See also *Psychoanalysis*)
Frey, M. v., obituary, 4
Friendship, child, 2574, 2581, 3008, 5972
correlations, 1029
Frog, axons, 3275
chronaxy asymmetry, 1822
habits, 4437
iris, 3795
muscle chronaxy, 4388
shortening, 2263
sympathetic effect, 2773
twitch, threshold, 5720
nerve, resistance, 2753
strength-duration curve, 5677
threshold, 3190
veratrine effects, 5670
reflex excitability, 1773
wiping reflex, 2819
Fröhlich syndrome, 5877
Frontal convolution, 3213
lobe and equilibrium, 3707
Functionalism, 1649, 3611
Fusion, vision, 3626
laterality and, 2787
Future, reactions to, 3841

Gait and character, 3812
(See also *Walking*)
Galton on religion, 5979
Galvanometer, 3120
Game, 4371
as test, 4749
Ganglion cells, intracardial, drug effects, 3210
changes, beri-beri, 2796
Gas mask, work variation with, 2041, 2047, 2062
Gastrointestinal movement and spinal parasympathetic, 2750
Genealogy and mental hygiene, 3954
Generalization, child, 482
in medicine, 3891
Genius, 707
case study, 913
heredity, 1352, 1856
normal, 150
paresis and, 3356
psychopathy and, 3391
psychosis and, 3312
social relations, 1899
(See also *Prodigy, Talent*)
Geography perspective, measurement, 2100
Geology, sex difference, 1148, 2148
Geometry teaching to blind, 1133
Geotropism, cat, 555
plant, 546, 1818
rat, 557
Germany, psychology in, 5590
Gestalt, 20, 65, 3611, 4284
in actions, 1304
bee, 539
behaviorism and, 1655, 2181
in child learning, 2079
psychology, 3549
contrast and, 2221, 3643
education and, textbook, 420
esthetics and, 4010
history, 4258
insight and, 64
learning and, 2745
in melody, 3147
movement, 5729
postulates, 1663
protective coloration and, 436
retention and, 479
of small figures, 3684
theory, humor, 2856
Wundt's contribution, 4217
(See also *Configuration*)
Gestation, primitive concept, 1982
Gesture, 1453, 3730
Ghost dance, significance, 5946
Giantism, 2770
Gifted blind child, 3001
Girl, ability and constitution, 327
delinquent, 1019
education, 4116
diary, 729
family and, 2583
motor ability, 4070
personality, 3003
problems, 309, 336
reading interests, 4796
thief, 3994
vocational choice, 360
in welfare home, 3530
working, 1986
Gland effects on sex in castration, 4365
modification of instinct, 4363
personality and, 598
sex, antagonism, 1308
submaxillary, electric response, 5722
(See also *Endocrine*)
Glare and acuity, 3628
muscle tension and, 4288
sun, 1238
Glycogen content in nerve activity, 1287
lactic acid vs., 2762
Goal gradient and running time, 4428
objects, 4246
Goethe, depressions of, 4552
psychoanalysis and, 1891
as psychologist, 16
Goiter, nervous manifestations, 2917
Goldfish, learning, 2306
Goodenough test, 1636
Government, mind in, 2927
Grade and age, child, 2137
deviation equivalents, 4829
location, scholarship, intelligence, 4825
-score equivalents, 4163
Grading compositions, 4136
(See also *Marking*)
Graduate student, information, 4803
tests, 6083
Grammar errors, junior high school, 4139
individual instruction, 3075
relativity in, 5917
studies, review, 6088
Graph, prediction from, 4162
Graphology, 683, 3476, 3730, 4682, 4699, 4700, 4704, 4709
in adolescence, 337
child, 325
of dishonesty, 1490
expert, 1501
law and, 2527
of proficiency, 1493
status, 2526
validity, 3968
(See also *Handwriting*)
Grasping, infant, 4770
monkey, 3294
(See also *Prehension*)
Grill, heat, 406
Grooming, primate, 2313
Group, community attitude toward, 1489
difference, 1612
matched, 366
individual study vs. college, 3575
tests, 6120
judgment of personality, 2372
marriage, 1036
opinion, effect, 4686
psychoanalysis, 3453
suggestion, 3331
treatment, psychosis, 5881
(See also *Crowd, Social*)
Grouping, ability, 1569, 2115, 2606
Brazil, 6061
homogeneous, 2139
mechanical ability, 1592
learning and, cockroach, 4439
primary, 1157
Growth of behavior, 5664
child, 2128
ethics, 743
guidance, 3005
Porto Rico, 2088
curves, 305, 1627
disorders, 1423
intelligence, 776, 4199
memory, 472
mental, 4204
differences, 6020
dull child, 4211
motor, child, 6049
personality, 576
(See also *Development, Maturity*)
Phycomyces, 527
physical and mental, 2067
plant, 120, 897
prediction, 2996
sex, boy, 2577
Grünbaum, A. A., obituary, 411
Guidance, vocational, 3503, 6003
for abnormal, 3919
efficiency, 4103
Spain, 6000
Guilt feeling, 144, 262, 1366, 4586
child, 317
neurosis and, 2420, 3338
in psychotherapy, 939
punishment and, in psychosis, 3922
Guinea pig, audition, 2298
centrifuged, labyrinth reflexes, 3282
hunger and audition, 450
learning, 2806

Gustation, bee, 3279
fish, 3284, 3287
fly, 3277, 3792
oyster, 4442
(See also *Taste*)
Gypsy child, 4021

Habit, antagonistic, rat, 541
complexity and learning curve, child, 4769
Dewey on, 6056
eating, and personality, child, 4753
formation, 3872
insect, 5740
intercorrelations, child, 2089
interference, 5725
retention, motor vs. verbal, 4424
suggestion and, 4498
(See also *Learning, Skill*)
Hall, G. S., social theory, 5935
Hallucination, 1920, 1921, 1946, 3898, 3948, 4558, 5884
auditory, 3362, 4540
case, 3399
child, 1104
delirium tremens and, 1945
encephalitis and, 970, 2399, 3932
after malaria, 2400
origin, 3357
paranoid, 3368
of self, 1424
Hallucinosis, 1942
peduncle lesion with, 3927
Hammer striking, 3251
Hand clasping, heredity, 1863
type, 3317
eye preference and, 3749
preference, 3747
Handbook, test scores, 3564
Handedness, 117, 504, 1313, 1317, 1764, 2282, 3235
age and, 1780
carotids and, rat, 547
child, 3554
eyedness and, child, 6044
heredity, 901, 1862
left-, 1316
primitive, 4427
school child, 105
sensory preference and, 3256
stuttering and, 3258
twins, 1864, 3308
(See also *Dominance, Laterality*)
Handicap, child, 3546
physical, and introversion, 4508
vocational adjustment, 3485
Handwriting, 2462, 2525
crime and, 2528
duplication, 3462
illegibility, 1481
Indian, 1506
instruction, 4862
intelligence and, 3966
lapses, 1379
lie in, 2533
mirror, 685
of music, 1971
in paresis, 4582
Philip II, 2484
pressure in, 2522
psychosis and, 2003, 2466, 2471
sex criminal, 687
difference, 4712
similar, 3969
size, 2518
style, 2513
of suicide, 2476
tension in, 2501
twins, 1351
(See also *Graphology*)
Hate, child, 6050
Hazlitt, V., obituary, 3134
Head vs. face form, 1311
Headache in neuropathy, 977
ciliary, 2222
sphenopalatine ganglion and, 1000
sympathetic and, 3196
Health, child, Russia, 3028
Heart acceleration and age, 5700
action current, 1799
forms and sympathetic, toad, 3785
ganglion cells, drug effects, 3210
(See also *Pulse*)
Heat adaptation, animal, 2820
changes, pigeon, 3773
and nerve system, vegetative, 495
pain and, 2737
production, crustacean nerve, 5660
muscle, 2268, 4362, 4377, 5705
nerve, 848, 5659
regulation, brain and, 491
hypothalamus and, 494
sensation, 1236
sensitivity, phasmids, 1808
(See also *Temperature*)
Hebephrenia, deterioration in, 3385
Hedonic theory, 3128
tone, theory and experiments, 1718
Height, child, 3523
weight and intelligence, 1538
Heinis personal constant vs. IQ, 4176
Hemianopsia, 5891
Hemiplegia, dielectrolysis in, 3363
lesion localization, 3888
(See also *Paralysis, Paresis*)
Hemorrhage, birth, 6017
hysterical, 2383
Henry, C., work of, 2195
Heredity, 901, 1349, 3313
acquired characters, 1857
anosmia, 5770
arithmetic and vocabulary, 122
artistic ability, 5763
ataxia, 131
beliefs about, 1064
blindness, 121, 1341
botany interest, 3801
color blindness, 3627
crime, 3443
deafness, 3167
drawing ability, 126
environment and, 1801, 6020
epilepsy, 1950, 3392, 5765
genius, 1352, 1856
hand clasping, arm folding, 1863
handedness, 1862
hypophrenia, 2323, 3401, 3806, 5777
hysterical reaction, 125
intelligence, 3804, 5778
lack of taste, 1687
left-handedness, 105
mental hygiene and, 987
Mongolism, 908
music ability, 1851, 2319, 3805
neuro-retinal disease, 826
paranoia, 3398
pathological audition, 5757
personality, 4473
primitive concept, 1982
in psychiatry, 1860
psychosis, 132, 561, 566, 904, 1350, 3802, 4475, 5762, 5892
quantitative characters, 5771
review, 2321
schizophrenia, 3372, 3408, 3958
study in man, 2317
surgical interest, 3800
taste, 3137
sense, 1343
tempo, 4472
test ability, 5760
tremor, 130
type and, 4487
(See also *Eugenics*)
Hermaphroditism, wasp, 1846
Heroin addiction, 572
Herrick, C. J., appreciation, 1187
Hibernation, adder, 1830
tortoise, 3286
High school achievement test, 761
composition preference, 2107
grades and college scholarship, 3070
graduate, intelligence, 1582
intelligence, 2110
interest inventory, 6074
junior, grammar errors, 4139
language and thought, 3582
marks, variability, 6054
mental hygiene, 1127
preparation for college, 3060
reading improvement, 1607
record and college success, 4111
scale, inferiority feelings, 4514
teaching, 1141, 2134
testing, Kentucky, 2599
(See also *Education*)
Highway signs, 4729
Histamin and stomach secretion, 2765
History, 3984
date load, 749
Jewish, knowledge of, 2130
psychology, 2907, 2695, 5575
Gestalt, 4258
Hazlitt, V., 3134
James, W., 2677
Moll, A., 2665
Wundt, 4238
study methods in, 1125
Höffding, H., obituary, 23
philosophy of, 1677
Home, adoptive, 2578
background, pupil, 3048
economics student, 2108
industry, 4670
library, 3539
life, maladjusted student, 1369
sex education, 4057
work, child, 2592
organization, 1075
(See also *Child, Family*)
Homesickness, adolescence, 319
Homicide, 711
(See also *Murder*)
Homogamy, 1066
beetle, 548
Homosexuality, 962, 1381, 2324, 3328, 5796, 5808, 5825
acquired, 1895
arson and, 5983
case analysis, 3339
endocrines and, 3334
female, 142, 2341, 4002
Honesty attitude, college, 1139, 3570
college, 4062
Indians, 5967
lack of, in handwriting, 1490
teaching, 1134
(See also *Cheating, Deception*)
Honor system, college, 4864
Horizon illusion, 4286
Hormone and sensitivity, 3149
(See also *Sympathin, Theelin*)
Horopter, 424
corresponding retinal points, 1215
Horse, Elberfeld, 5737
Hospital, mental, 3926
Germany, 3911
psychiatric, 5837
Humor, 1911, 2858, 4504
antique, 3856
comprehension, child, 6024
Gestalt theory, 2856
personality and, 143
(See also *Wit*)
Humoral transmission and chorda tympani, 5702
Hungary, philosophy in, 4220
Hunger and audition apparatus, 450
in learning, 109
as maze incentive, 2296
motility and, infant, 2076
neurosis and, 1939
rat, 552, 553
(See also *Inanition*)
Hydra, galvanotropism, 1821
polarity reversal, 3304
Hydrocephaly, 636, 2877
traumatic, 1390
Hydrotherapy, psychosis, 2922
Hygiene, child, 4052
Sweden, 1101
mental, 673, 955, 1932, 1956, 1963, 2448, 2449, 2874, 2885, 3879, 3887, 3893, 3896, 3917, 3929, 4135, 4637, 5907, 5909
adolescence, 1098, 1114
bibliography, 2875
birth control and, 5902
of blind, 4863
child, 2580
clinic, 5849
college, 1108, 4153, 4799
congress, 3882
deformity, 2991
depression and, 4629
disease, 3937
education and, 1580, 3918, 6093
progressive, 4128
eugenics and, 2909
family, 1483
Finland, 980
genealogy and, 3954
Germany, 1929
growth of, 4526
heredity and, 987
high school, 1127

industry, 943, 2039, 3964
Italy, 999
medicine and, 953, 2921
movement, 944, 994, 1004
nursing and, 2916
old age, 3925
parental attitudes and, 4089
philosophy, 2898
physical education and, 3905
projects, 993
psychoanalysis and, 5865
public opinion and, 984
Russia, 986, 4617, 4638
school, 3045, 3572, 4870
Poland, 6091
social aspects, 4590
work and, 3381
teacher, 2136, 4871
office work, 5999
Hymenoptera, behavior, 3790
instinct and intelligence, 1840
Hypertonia and migraine, 863
Hypnosis, 573, 1868, 4484, 4485
alcohol and, 1376
amnesia, and practice effect, 595
anesthesia in, 937
conditioning and, 918
effects, 3326
in psychiatry, 974
psychoanalysis vs., 1388
in psychosis, 1910
recall and, 604
regression in, 5800
retroactive inhibition and, 1372
self, 936
suggestion and, 1361, 2327
theory, 5819
vegetative influence by, 4480
Hypochondria and body interest, 3012
psychoanalysis, 5798
Hypophrenia, 185, 1915, 2409, 2453, 3358, 3359, 3410, 4079, 4609
adjustment, 2427
age and, 4640
behavior problems, 2604
birth injury and, 621, 2402, 2406, 5857
blindness in, 2873
brain surgery in, 4591
capillaries in, 202
care, 666, 959
Canada, 2424
child, 676, 732, 3907
coeducation in, 4120
colony treatment, 1408
community, 3419
compulsion in, 3941
crime and, 1509, 4623
dentistry in, 2433
education, 355, 1936, 2404, 2405, 2625, 2645, 2658, 3041, 3889, 4131, 4138, 4151, 4531
effects of care, 3912
England, 1417, 5905
etiology, review, 634
eugenics, 3364
extraordinary memory in, 2249
heredity, 2323, 3401, 3806, 3958, 5777
incidence, 199, 2392
institution, 2431, 2454
Jews, 3930
Kuhlmann test in, 4887
learning in, 2892
mechanical ability in, 5888
mortality in, 1924
music in, 2450
naevoid, 4524
New Jersey, 1404
occupation in, 3924
background, 2439
therapy, 672
parole in, 2389
Pennsylvania, 2428
physical training, 2430
play in, 2452
pseudo-, 1433
psychoanalysis and, 2393, 2394
reading in, 2415
recreation in, 3417
research, 2403
school child, 1570
severe forms, 5904
South Africa, 4178
special gifts in, 3946
speech in, 2891
defect in, 2426
study, 956
success in, 4622
thought in, 2386, 4779
training in, 2414
twins, 2322
visual education in, 2642
(See also *Idiocy, Mongolism*)
Hypophysis, 1288
Hypothalamus and heat regulation, 492
Hypothesis, 1838
formulation, 1254
rat, 894, 5738
Hysteria, 649, 975, 1392, 1919, 1926, 1935, 2848, 2882, 3886, 3921, 4566
blindness, 976, 1940
child, 1401
crowd mind and, 5893
deafness, 1951
encephalitis and, 179
hemorrhage in, 2383
"pregnancy," 1958
psycho- vs. physiogenesis, 3361
reaction, heredity of, 125
treatment, 678, 3962

Idea, 3622
cinema and, child, 2594
community of, in negro, 4666
flight of, 5842
primitive, 2035
(See also *Thought*)
Ideal and achievement, 3751
negative, in youth, 3550
problem child, 738
punishment and, child, 3021
Idealism, 4245
Identification, false, 4543
social values and, 940
Idiocy, amaurotic, 989
family, 3409, 3427
xerodermic, 5856
(See also *Hypophrenia*)
Idiot, delayed reaction, 630
savant, 2
sensory discrimination, 622
Idyl, motivation, 3981
Illness, feeling modifications in, 1429
problems, 3902
reeducation after, 2912
training in, 3937
Illumination and color, 1706
constancy, 1714
efficiency and, 4721
eye, rabbit, 2807
field, and simultaneous contrast, 1231
legibility and, 705
office, 3165
one eye and acuity of other, 4277
retina, 451
traffic accident and, 1512, 1513
in weaving, 283
(See also *Lighting, Vision*)
Illusion, 1234, 3825, 3847, 3862, 3901
of amputation, 3654
contrast, 4291
of doubles, 3899
Ebbinghaus, 2224
horizon, 425, 4286
memory, 1725
movement in darkness, 426
Poggendorff, 1224, 1230
reversible, 5632
susceptibility and age, 5618
of touch, pathological, 5615
visual, 1216, 4281
Image, after-, 1688, 1710, 2220
color in, 1219, 1220
body, 452
-changing lenses, 801
difference correction, vision, 820
letter group, 471
projection, 1265
use of, 3696
in vision, 800
(See also *Vision*)
Imagery, delusional, child, 3528
differences, 4308
hypophrenia, 2892
observation and, 61
in psychosis, 1431
psychotherapy, 1413
retention and, 2742
type, 476
visual, and eye movements, 2208
(See also *Number*)

Imagination, 3692, 3700
child, and poetry, 4664
disturbances, 2407
Imitation, child, 4776
(See also *Mimicry*)
Immigrant intelligence, 2498
Immigration, 3441
child delinquency and, 5915
delinquency and, 5914
Immunity, conditioned, 507, 2271
Importance and retention, 5650
Impotence, sexual, 1914
therapy, 138
Impulse, 1315
crime of, 2517
disturbances, 3360
trophic, 3754
wish and, 344
(See also *Drive*)
Inanition and fatigue, 4406
(See also *Hunger*)
Inbreeding, Switzerland, 3306
Incentive, arithmetic, 1571
effects, 2152
idiot learning, 1913
industry, 2542
learning, 1320
maze learning, 2296
rat, 2289, 2290
school, 3610
work, 2055
(See also *Motive*)
Incest, 2859
barrier and society, 2971
prohibitions, 1024
Indeterminism, 17
Index distribution, 1610
Zsch. f. Psychol., 782
India, philosophy, 1202
problems, 699
psychology, 4250, 4251
Indian dreams, 2958
handwriting, 1506
honesty, 5967
intelligence, 712, 2475
juggling, 2932
music, 233, 2933
personality, 3436
secret society, 2943
17th century, 2961
tests, 2022
Indifference feeling, 5644
Individual differences, learning, 5568
mental growth, 6020
psychology, 2864, 4486
critique, 3342
journal, 398
summer school, 1365
society and, 5948
study vs. group study, 3575
treatment, college, 1130
work methods, efficiency, 2145
Individualism, psychology, 392
Induction, 4166
inhibition and, 1322
psychophysical, 4291
Industry, fatigue in, 1518
home, 4670
incentive in, 2542
mental hygiene in, 943, 2039, 3964
personnel selection in, 1520
psychology in, 723, 2063, 4742
psychophysics in, 4745
school, sex difference, 4854
(See also *Employment*)
Infant, adaptive behavior, 1561
behavior, mass activity in, 1095
brain, 1092
cerebral activity, 4782
chimpanzee, 1331
color response, 1110
crying during tests, 1535
development, 4088
eye dominance, 338
food temperature, 4059
grasping, 4770
itch and scratch, 3526
memory, 2346
monkey, 1339
motility, 2075
hunger and, 2076
physique and, 4060
personality, 6042
postures, 3520
prehension, 730, 734

reflex and gastric secretion, 2766
self-consciousness, 2097
social development, 3516
speech, 2069
taste and temperature, 1552
test, 5562, 6119
thumb sucking, 318
(See also *Child, Fetus, Neonate*)
Inference, hypothetical, 1262
Inferiority feeling, child, 2080
inventory, 4514
test validation, 345
national, 2956
Influence, social, 2508
Information, graduate student, 4803
status and intelligence, 1099
Inhibition, 1279
conditioned, of diuresis, 1766
conditioning, 4378, 4420
contralateral extension, 5679
emotional, in learning, 313
fatigue and, 3246, 3247, 3266
formation, 4392
induction and, 1322
negative conditioning and, 2779, 3255
personality, 2418
in plant, 897
removal by bromide, dog, 4448
dog, 4447
retroactive, 481, 3187
in hypnosis, 1372
punishment and, 3229
set and, 4315
Sechenov, 2757
skeletal muscle, 5693
sweat secretion, cat, 2259
sympathin and, 4361
time relations and, 4402
type, nervous system, 4355
(See also *Excitation*)
Initiative, 1796
advantage and danger, 1775
aids, 1777
education and, 2101
its opposite and, 1798
preparation for, 1763
will and, 1756
Insanity, protein theory, 1416
(See also *Psychosis*)
Insect, climbing organ, 892
habit and instinct, 5740
instinct vs. intelligence, 1330
light reactions, 3305
nerve center, 3720
population density and reproduction, 896
society, traditions, 1840
strength and weight, 2813
(See also *Ant, Bee, Beetle, Caterpillar, Cockroach, Fly, Hymenoptera, Larva, Moth, Wasp*)
Insight, 62
Gestalt and, 64
rat, 1837, 2291
in teaching, 474
Insomnia, 934
treatment, 5861
Instability in child, 3883
Instinct, 1670
animal, 550
death and anxiety, 137
doctrine, psychoanalysis, 1901
glandular modification, 4363
insect, 5740
intelligence and, 1754
character and, 608
Hymenoptera, 1840
insect, 1330
interpretation, 831
maturation vs., 1801
nature, 3126
nerve and, 3718
primate, 5734
social, localization, 4399
variability, 116
Institute, psychology, 2176
Cluj, 4235
psychoneurology, Kiev, 4256
Institution, child diet, 4081
Instruction and concept formation, 475
individual, 3069
inductive vs. dogmatic, 3054
learning and, 509
maturation level and, 4912
remedial, 2656
test scores and, 3076
in work, 2056
(See also *Education*)
Insulin and gastric motility, 3253
superfluity and epilepsy, 4569
Insurance, 4660
Integration, sense processes, 4338
Intelligence, 68, 3100
accident proneness and, 2545
adult, 3596
age, 4183
sex difference and, 4177
algebra ability and, 4145
animal, 3274, 4432
association score and, 377
beauty and, 4843
Belgian, 1173
Binet performance and, 4198
brain and, 1634, 2877, 3613
changes, superior child, 4188
character and, 4492
child delinquent, 5915
parent vocation and, 5759
in clerical work, 4734
constancy, gifted child, 1642
coordination and, 2777
correlations, 920
crime and, 4655
culture level and, 3481
deafness and, 2129
delinquency and, 1981, 2509
difficulties, child, 3546
emotion, introversion, 464
environment and, 4898
factor theory, 6128
fertility and, 1855, 2829, 3311
grade, scholarship, 4825
growth, 4199
handwriting and, 3966
height and weight relation to, 1538
heredity of, 3804, 4474, 5760, 5778
high school, 2110
graduate, 1582
immigrant, 2498
Indians, 712, 2475
instinct and, 1754
character and, 608
insect, 1330
Jewish, 5969
kindergarten-primary majors, 2622
life and, 2683
mechanical ability and, 1592
memory and, 73
mental growth differences and, 6020
Mexican, 232
child, 4067
monkey, 4466
motor ability vs., 879
mountain child, 3595
musician, 1028
negro adolescent, 2459
boy, 1974
neuroticism and, 1375
nursery school and, 3106
occupation, education, 3506
personality and, 1128
scholarship, 4112
physical disability and, 3061
physique and, 1640
preschool child, 2089
quotient, 4180
constancy and interval, 3094
problem child, 3521
review, 3099
superior child, 4896
Heinis personal constant vs., 4176
improvement, 2165
interpretation, 2674
school experience and, 2164
variability, 2667
racial type, 1496
recidivism and, 4701
schizophrenia, 1414, 2417, 3920
scholarship and, 755, 4816, 4857
load and, 3052
prediction, 4910
sex difference, 4045
sibling resemblance in, 5758
similarity and age of siblings, 3309
smoking and, 574
South Africa, 776, 4178
Spanish-speaking child, 4200
speech and, 774
defect and, 4007, 5933
speed and, 374, 771, 773, 1180, 3597
child, 3046
review, 3093
spelling ability and, 4154
status and information, 1099
student, 2156, 3574, 3593
correlations, 1593
superior, 1355
teacher college, 6098
test, 376, 1172, 1630, 2664, 2669, 3092, 3105, 4891, 4903, 4904, 6129
African, 2668
analysis, 2670
athlete, 523
Binet, 4209
Pintner vs., 1637
revision, 4894
Bobertag-Hylla, 4893
Bourdon, 4201
Brazil, 6122
college, 4196
comparison, 4181
constancy, 375
preschool child, 1638
educational selection, 4905
examiner influence, 1639
4–8 years, 5564
items, 380
validity, 1632
mental age, 2672
misuse, 4821
motive, 2162
norms, 373
practical, 4908
prediction by, 4810
of scholarship, 3070
preschool, 4186
puzzle, 4897
ranking, 5570
reliability, 4215
review, 6123
short, 4174
Stanford-Binet, 1181
student, 2113
teacher college, 1579
time in, 1174
vocabulary difficulty, 4192
transient school child, 340
twins, 565, 3308
variation, dependent child, 3015
verbal vs. non-verbal, 1178, 3592
vocational ability and, 1529
choice, 2543
Intensity, 2213, 2216
change, tones, 2215
as dimension, 2168
duration and, sound, 5621
stimulus, 4353
light, and pupil size, 808
loudness and, 3159
reflex and, lid, 521
tension in reading and, 5622
Interest, child, 1115, 4785
development, woman, 146
inventory, 756
high school, 6074
measurement, 2666
motive adult student and, 4828
occupational, simulation, 4205
therapy, 620
twins, 1342
personality and, teacher, 2616
in pictures, 1556
points in city, 2627
scholarship and, 1583, 4845
test, 3103
scoring, 4207
value, psychology topics, 4117
vocational, 2552
college, 4719
Interference of habits, 5725
Interpretation, psychoanalysis, 571
Interval discrimination, 5961
IQ constancy and, 3094
Interview, 6072
short contact, 265
teacher selection, 2982
Intestine, action current, 1296
Intimacy, social, 4014
Intoxication, blood changes, rat, 2817
Introjection in depression, 2852
Introspection, 2192
Introversion, 2328, 2329
correlations, 920
emotion, intelligence, 464

physical handicap and, 4508
test, 582
Intuition, 98
initiative and, 1756
in science, 5810
Intuitivism, 4233
Invention, child, 2575
Invertebrate neuroglia, 1747
(See also the various phyla)
Involution depressions, 207
paranoia, 215
Iowa child studies, 4748
Iris, adrenalin in, 1312
fish, 3686
frog, 3795
shark, 3685
Irradiation, cortical, 1284, 2274
sensation and, 4274
Irritability, 4222
muscle tension and, 505
Isopod, adaptation, 1841
light response, 3781
Italian child, dull, mental growth, 4211
Itch sensation, infant, 3526
(See also *Pruritus*)

Jackson, J. H., works, 671
James-Lange theory, 4304
James, W., attitude toward science, 2677
exposition, 5583
Japan, care of psychotics, 3961
language schools, 4016
Jazz music, 5959
Jealousy, 962
as defence, 2860
psychological, 5817
sibling, 3033
Jesus, personality, 3448
Jew, audition, 2521
history, knowledge of, 2130
intelligence, 5969
psychology, 4706
psychosis, 1398
prevalence, 3930
race consciousness, 3468
religious attitude, 2010
Job analysis, secretary, 6010
Journal, experimental education, 1117
individual-psychology, 398
Instruments, 2169
Rumanian, 3129
on suicide, 2187
Joy, 2680
malicious, 57
Judge, personally selected, 1386
sentence differences, 3455
Judgment in absolute units, 5609
beauty, race difference, 1477
class size, modification, 4801
distance, 1246
emotion from facial expression, 2740
group, of personality, 2372
loudness, 5613
occupation, 2348
personality, 2379
pooled, 4042
psychophysical, 4262
quality and sense impression, 4728
reliability, 3598
self, 3823
sex from handwriting, 4712
size, 44
space, boundary effect, 4289
texture, wool, 2040
time, 5620
(See also *Rating*)
Juggling, Indians, 2932
Jung, C. G., psychology of, 600, 642, 2354, 5781

Kiev institute of psychoneurology, 4256
Kindergarten, bibliography, 4834
-primary teacher, 2622
teacher, first position, 6106
Kinesthesis and musical memory, 2744
time and perception, 4285
Kinship terms, China, 2928
Kline, G. M., obituary, 3615
Knee jerk, 3737, 3746
Knowledge, Kohs test, 4182
and liberty, 3603
problem, 2696
theory, 783
Korsakov syndrome and encephalitis, 619
Kuhlmann test in hypophrenia, 4887
Kymograph, 1680

Laboratory, Bucharest, 4260
lecture vs., 3064
pedagogy, Cluj, 4225
Labyrinth vs. cerebellum, 3759
choked, audition in, 4268
chronaxy, 2782, 4422
cortex and, 667, 3214
diagnostic significance, 660
function, 1782, 3164
movement in, 3680
muscles and, 799
nystagmus, 2789
reflexes, 514
centrifuged guinea pig, 3282
drug effects, 887
removal, dove, 5735
response, drug effects, 2786
sea-sickness and, 4395
syndrome and brain tumor, 3387
treatment by vaccine, 854
vestibular reaction and, dove, 5736
(See also *Rotation*)
Lacrimation, anomalous, 1303
(See also *Weeping*)
Lactic acid and exercise, 4421
glycogen vs., 2762
in nerve activity, 5669
Language, 2481, 2926, 4004, 5938
adult learning, 1574
aphasia and, 5863
auxiliary, 5929
child, 2538, 3002, 3026
persistence, 6018
chimpanzee, 551
clothing and, 2014
conflict, 1492
consciousness and, 5968
difficulty, child, 3546
disorder in child, 6030
instability, 4659
in intelligence, 3592
learning, 2117
pathology, 5934
preschool child, 1532
recall and, 834
recording apparatus, 5584
richness, African, 3450
secondary school, 3582
teaching, 358
theory, 4696
transfer, 4122
twins, 3308
universal, 5912
wasp, 4463
(See also *Bilingualism, Speech, Verb, Vocabulary, Vowel, Word*)
Lapse, 2371
handwriting, 1379
Larva, digging, 3769
Larynx chronaxy, 1736
in laryngeal paralysis, 2749
reflex, dog and rabbit, 1326
Lateral line, 3782
Amblystoma, 3298
nerve response, 3783, 3784
Laterality, 2767, 3235
rat, 4456
visual fusion and, 2787
(See also *Dominance, Foot, Handedness*)
Laughter, 5822
child, 1543
(See also *Smile*)
Laurence-Moon-Biedl syndrome, 662
Law aptitude, 1516
test, 2947
crime tendency in, 1457
divorce, 1049
graphology and, 2527
marriage and, 1038
operation of, 1030
psychiatry and, 1488, 2969, 4669, 5964
Sweden, 1419
psychoanalysis and, 1465
psychology and, 270, 1058, 1964, 1970, 3979
review, 4693
(See also *Crime*)
Laziness, child, 2073
Leader, character, 2361
religion, 2946
Leaders in education, geographic distribution, 1602
Leadership, 2053, 5966
adolescence, 2334
child, 4797, 6035
China, 1998
college women, 701
gifted child, 2564
high school, and success, 6060
Leading and reading speed, 3999
Learning, 1256, 2758, 2759, 2763
adult, language, 1574
review, 5723
affective factor, 3181
age and, 2746
animal, 114
ant, 533
motivation and, 4454
anticipation, rat, 4457
backward, rat, 1826
bibliography, 2277
bird, 2311
castration and, rat, 529
cat, 2309
chicken, factor theory, 3774
child, 3547, 4092
ape vs., 3787
Gestalt in, 2079
comparison of materials, 4397
complexity and, 485
concepts, negative instances, 5654
conditions, 839
curve, 843
form, 2264
habit complexity and, child, 4769
direct vs. incidental, 832
under directed attention, 3185
distribution of practice, 1263
elevated maze, rat, 2291
emotional inhibition, 313
equivalent stimulation in, 480
errors, 2250
Gestalt and, 2745
goldfish, 2306
group, cockroach, 4439
guinea-pig, 2806
hedonic theory, 3757
hunger in, 109
hypophrenia, 2892
inactivity and, cockroach, 2299
incentive, 1320
instruction and, 509
law of, 2743, 4416
of effect, 1793, 3182, 3188, 4375, 4415
maturation vs., child, 2074, 2078
maze, all-or-none, 5716
anticipation in, 837
cord lesion and, rat, 540
cues, 1758
diet and, rat, 1836
incentive, 2289, 2290, 2296
motivation and, 558
rat, 554, 2292, 2293, 2294, 2297, 2826
in senility, 2788
space integration in, 1759
tension, 884
ventricle dilation and, rat, 3288
mechanism, 4381
methods, 4811
piano, 4360
modern language, 2117
motor, child, 3514
transfer, 346
nature of, 2270
paralysis and, 3281
parrot, 2301
personality and, 1888
pleasantness and, 4305, 4327
pleasure-pain theory, 92
practice effect, 1258
primacy, recency in, 473
principles, 869
punishment and, 3229
child, 316
rat, 2314
incidental stimuli, 1832
reward and punishment in, 531
sex difference, 545
retroactive inhibition, 481
reward and, 1794
chicken, 1809
punishment and, 503, 3186, 4393, 4394
serial, 836, 841
punishment in, 2278
set and, 4322
shock effect on, 4326
sociology of, 3079

speech, infancy, 6023
subliminal and supraliminal, 4319
telegraphy, 1514
temperature and, rat, 440
tension and, 522
test, individual differences, 5568
textbook, 3227
theory, test, 1264
variability, 3180
vividness, 3693
warming-up effect, 3699
whole vs. part, 63
methods, 4307
(See also *Conditioning, Distribution, Habit, Insight, Mass, Memory, Practice, Punishment, Recall, Recency, Reminiscence, Reward, Skill, Training*)
Least squares, 1615
Lecture critique, psychology, 4121
laboratory vs., 3064
study discussion vs., 4086
Leech, color vision, 4469
Legibility, capitals, 229
color effects and, 4708
lettering, 4705
print, 3461
handwriting, 1481
leading and, 3999
type face and, 4000
(See also *Reading*)
Lens, contact, 3633
image-changing, 801
Lesion, apparent, and threshold, 2256
behavior constancy and, 4436
Letter group imagery, 471
writing, child, 2615
Lettering scale, 4841
Leucocytosis in rest, exercise, adrenalin, 1778
Lewin, K., vector concept, 419
Liberalism, student, 1039
Liberty and knowledge, 3603
Libido changes after sterilization, 3353
civilization and, 4503
early stages, 5801
types, 2343, 5795
(See also *Psychoanalysis, Sex*)
Library in occupational therapy, 1391
student knowledge of, 4130
Lie, child, 341, 2081
detection, 1721
in handwriting, 2533
(See also *Pseudologia*)
Life course, 4221
expectation in psychosis, 3929
intelligence and, 2683
trends, psychological, 1647
unit, 2685
Lifting and uterus position, 3249
Light absorption, retina, 4299
visual purple, 4279
apparatus, 5581
discrimination, rat, 5732
effects, eye, 1221
on tortoise hibernation, 3286
intensity measurement apparatus, 5597
pupil size and, 4271
measurement and apparatus, 4242
orientation, insect, 3771
pigment change and, fish, 3291
receptors, clam, 3289
reflex, 3741
response, isopod, 3781
sensitivity, Protozoan, 3789
sex periodicity and, 1839
work and, 1523
(See also *Vision*)
Lighting, day to night, 807
(See also *Illumination*)
Limen, color difference, 401
differential, for brightness, 5619
duration, in touch, 3155
(See also *Threshold*)
Limulus eye, nerve response, 2805
Linearity test, 367
Lip reading in deafness, 1041
Lipps, G. F., obituary, 403
Lisping, 2949
Lissauer tract, dorsal root contributions, 1748
Literature, appreciation, 240, 750
correlations, 1452
test, 347
child, 1116
criticism, 691
Defoe, psychology of, 223
Goethe's *Iphigenia*, 1033
motif analysis, 253
neurosis and, 590
personality determinants, 3318
psychic function, 5785
psychoanalysis and, 1447, 5805
psychology and, 1199, 1450, 4680
psychopathy and, 3814
psychosis in, 5887
test, 1573
(See also *English, Proust, Romanticism*)
Localization, critique, 1289
cutaneous, 435
during eye movement, 1244
pain and touch, 4283
righting reflex, cat, 1286
social instinct, 4399
sound, 427, 823, 2196, 2716, 2728, 4280, 4297, 5616
vision, 433
Logic, papers on, 4243
Lombroso, diary, 1198
Longing, adolescence, 4764
Loudness and duration, sound, 5621
estimation, 5613
intensity and, 3159
Love, choice, 1026
development in, 1995
platonic, 5808
psychosis and, 1949
transference and, 2374
types, 264
(See also *Sex*)
Machinery and skill, 5988
Magazine obsession, 2951
Magic, 163, 3901, 5576
beauty and, 2460
modern, 2486
in obsession, 5812
primitive, 2495
religion and, 275
(See also *Sorcery, Superstition*)
Malaria and alcoholism, 3934
hallucinations, 2400
Malice in joy, 57
Malta fever, mental concomitants, 4616
Mammal, chronaxy asymmetry, 1823
(See also *Ape, Beaver, Cat, Chimpanzee, Dog, Guinea pig, Horse, Monkey, Mouse, Opossum, Primate, Rabbit, Raccoon, Rat*)
Man, older, ability, 1890
sublimation, 2024
Mana and soul, 1009
Mania, 24, 25
following alcoholism, 3373
chronic, 2897
paranoia and, 3944, 3945, 5890
resembling paresis, 2896
(See also *Flight*)
Maori, assimilation, 4654
Marching, energy expenditure, 4727
Marking, constancy of, 357
examinations, 1589
sex bias, 2634
standards, 350
(See also *Grading*)
Marks and achievement test, 1604
competition for, 4808
high school, variability, 6054
school, 1598
influences on, 4866
variability, reduction, 4856
Marksmanship, energy cost, 2051
motor development and, 1790
Marriage, 236
adjustment, 1046, 1072
advice, Germany, 3980
age, 1359
oldest son, 1455
divorce and, 1077
epilepsy and, 3307
group, 1036
guidance, 1017
law and, 1038
selection and character, 2535
success, distribution, 5919
(See also *Divorce, Family, Sex*)
Marxism, philosophy, 2493
student, 2499
Masochism, 161
Mass activity in infant behavior, 1095
Mastery, 4521
Mastoid operation effects, 4643
Masturbation, 3855
child, 4049
psychosis and, 646, 647
therapy, 2899
Matching groups, 2155
error of, 4161
Mate selection, 901, 1066
Maternal behavior and corpus luteum, 4364
instinct, gland modification, 4363
Mathematics aptitude, 3040, 3043, 3073
disability, student, 757
influences in, 75
physics and, college, 2632
prodigy, 76
talent in, 363
teaching, 2140
(See also *Algebra, Arithmetic Growth*)
Maturation in adolescence, 3545
instinct vs., 1801
learning vs., child, 2074, 2078
level and instruction, 4912
(See also *Growth*)
Maturity differences, personality test, 1382
(See also *Growth*)
Maze, anticipation in, rat, 4457
automatic, 5587
behavior, non-random, 1327
rat, drug effects, 1825
child, 1653
comparative retention, 4397
learning, all-or-none, 5716
ant, 533
anticipation in, 837
cord lesion and, rat, 540
cues in, 1758
diet and, rat, 1836
elevated, by rat, 2291
incentive, 2296
rat, 2289, 2290
motivation and, 558
rat, 554, 2826, 2292, 2293, 2294, 2297
incidental stimuli, 1832
senility, 2788
tension in, 884
ventricle dilation and, rat, 3288
orientation, rat, 2827
paper, 24
recording, 3116
reliability, 416
rotation, rat, 1340
self-recording, 384, 417
space integration in, 1759
technique, 1193
test, Porteus, 6124
transfer, 470
(See also *Learning*)
McCall test, validity, 4187
Mean, difference, 2155
Meaning, child, 3583
its lack and, 3601
nature of, 4645
problem, 4324
(See also *Significance*)
Means-end readiness, 1838
Measurement, educational, test, 1595
interest, 2666
Mechanic, test, 280
work of, 2057
Mechanical ability, critique, 2160
hypophrenia, 5888
intelligence and, 1592
prediction, 4890
test, 378
aptitude, prisoner, 4011
Mechanics, motor system, 5691
Mechanism, 3108
defense, 2687
Medicine, aptitude test, 2133
generalization in, 3891
mental hygiene and, 2921
psychiatry and, 4596, 4602
psychoanalysis and, 5791
psychology and, 1410
student selection, 1527
Mediumship, 166, 583, 1872, 1896, 3344, 3866, 5831
art and, 2340
photography and, infra-red, 4509
tests, 4517
Medulla of cyprinoids, 891
Meeting, American Psychological Association, 2183
Ithaca, 1189
proceedings, 1205
international congress, 787, 1188, 1190
mental hygiene congress, 3882

Midwestern Association, 415
proceedings, 1194
New York branch, American Psychological Association, proceedings, 1188
Nordic psychiatric congress, 1393
prison congress, 3983
psychopathology, 4570
psychotechnical congress, 1206
Rocky Mountain branch, 5573
Society of Experimental Psychologists, 387
tenth congress, 1196, 1204, 1214, 1662, 2186, 5603
Western Association, proceedings, 1209
Megalith symbolism, 4019
Melancholia, hormone therapy, 178
organism in, 4595
visual field in, 3403
Melitococcia, mental concomitants, 4616
Melody, 2540
Gestalt in, 3147
play of, 2515
Memory, 444, 1255, 1723, 3691
apparatus, 4212
child, 321, 1253, 3009
Brazil, 71
color, 2707
Daphnia, 1842
deaf-mute, 4325
defect, 5655
disturbance, 2407
early, 4065
for emotional word, 838
errors, 2250
experts, feeble-minded, 2249
factor, 469
factual, 4310
feeling and, 4327
growth, 472
illusion, 1725
for incomplete acts, 77
infant, 2346
intelligence and, 73
musical, and kinesthesis, 2744
names, 2246
perspectives, 5624
of preschool experience, 6019
prodigy, 76
psychosis, 5900
school, 2347
talent and, 726
test, Bernstein, 1643
norms, 3024
trace, 1726
value of size, 2248
of words, 3703
(See also *Amnesia, Learning, Mnemism, Retention*)
Meninges, permeability, 204
Meningitis, 3906
Menopause, 603
(See also *Climacterium*)
Menstruation, 168
anxiety, 141
attitude, boy, 927
depression preceding, 152
effects, 140
temperature and, 1770
(See also *Dysmenorrhea, Ovulation*)
Merchandising, 1524
(See also *Sales*)
Mescalin and Rorschach test, 5830
Metabolism, Chinese girl, 4047
emotion in psychosis and, 1438
muscle, 2276
protein, and work, 1800
Meter, 5927
Germanic, cause, 5940
sense in poetry, 4673
Method, 2690
psychoanalysis, 911
psychology, 785
Mexican child, intelligence, 4067
mental fatigue, 4114
intelligence, 232
Micropsia, 445
case, 4298
Midwestern Association, meeting, 415
proceedings, 1194
Mignard, M., obituary, 4597
Migraine, 1933, 5895
hypertonia and, 863
psychological, component, 677
scotoma, 2204
Migration, 3283
negro, 250
Mimicry, 3977
blind and, 2205
vocal, 3976, 4656
(See also *Imitation*)
Mind, 1664
behavior and, 4257
body and, 778, 4241, 5605
problem, 2173
development, 3110
energy and, 4249, 4223
evolution of, 1854
nature of, 3127
place of, 5594
theories, 1203
Ministry and psychoanalysis, 242, 234
psychology and, 248, 710
psychosis and, 200
Minnow, equilibration, 4444
Mirror drawing, 4389
writing, 501, 685
first grade, 5945
Mnemism, 3108, 3118
Modality and roughness, 1715
Model, postural, 452
Modeling of child, 2072
Modesty, 1898
Moisture cues, 3153
Moll, A., appreciation, 2665
Mollusk, muscle strength, 2823
(See also *Clam, Oyster, Snail*)
Money, child's use, 3525
neurosis and, 3865
Mongolism, 4612
blood grouping, 659
heredity, 908
negro, 4598
parent age and, 5894
twins, 4476
Monkey behavior, 3285
counting, 4438
delayed reaction, 5754
grasp reflex, 3294
infant, 1339
intelligence, 4466
logical perception, 4458
nerve degeneration, 5665
paraplegic flexor reflex, 1769
pattern discrimination, 797
reaction to change, 2816
thumb sucking, 4049
touch recognition, 4459
Monogamy, 1449
Montessori system, 4142
Mood and efficiency, 3500
Moon illusion, 4286
Moral judgment, convict, 3452
value, 1470
Morality, 2005
cinema and, 2516
Morals and handwriting, 4700
(See also *Ethics*)
Morphinism, 3871
Mortality in hypophrenia, 1924
(See also *Death*)
Moth, cocoon-making and nervous system, 2822
color vision, 4441
Mother attachment, 1902
attitude in child guidance, 4772
care, monkey, 1339
control by mind, 2362
employment, child attitude on, 3023
influence, 606
over-protection and scholarship, 2579
(See also *Maternal*)
Motility and hunger, infant, 2076
infant, 2075
physique and infant, 4060
sleep, 1881, 5809
cinema and, 2367
(See also *Activity*)
Motion, apparent, 1216
effects on body, 1324
Motion picture, see *Cinema*
Motivation and learning, 4454
index, student, 755
maze learning and, 558
Motive, 3979
in engineering, 2060
intelligence test and, 2162
neurosis, 2422
(See also *Drive, Incentive*)
Motor ability, adolescent girl, 4070
athlete, 523
child, 747, 2077
deaf child, 1701
intelligence vs., 879
centers, 4345
chronaxy and cortex, 1735
cortex, cat, 2818
stimulation, 5662
deficiency, 4367
development, child, 6049
marksmanship and, 1790
expression of effect, 158
learning, child, 3514
phenomena, 5703
psychosis, 638
reaction and alcohol, 1797
rhythm, child, 2538
set and personality, 5715
skill and aptitude, 2284
twins, 2833
synesthesia, 453
system and mechanics; 5691
test, 510, 3250, 5709
type and insufficiency, 3429
Mountain culture, Virginia, 3481
music, 5965
Mouse, hunger and audition, 450
orientation, 4445
Movement, apparent, 458, 2719
tactual, 2223
visual, 2726
arm, study of, 1802
cinema of, 2286
discrimination, rat, 5733
electric stimuli for, 1757
expressive, 3730
eye vs. apparent, 3171
measurement and work habit, 3817
pattern, 5729
perception, 431
peripheral, 2735
reversal, 5694
sensation, 37
visual, 1711, 2722
apparent, 2206
voluntary vs. reflex, 3259
(See also *Motility*)
Movie attendance of delinquent boy, 1497
(See also *Cinema*)
Mucosa, nasal, in alcoholism, 5726
Mulatto, fertility, 4665
Mumps, deafness after, 4571
Murder and capital punishment, 251
(See also *Homicide*)
Muscle action, 3744
current, 3259
brain vs., 3212
capacity and attention, 97
chronaxy, 511, 1795
frog, 4388
contraction, 1787, 4408
action current and, 3257
potential, 1771
arthropod, 3793
power change in, 3764
tetanized, 3260
contracture, 1301
excitability, 1751, 1752, 3239
testing, 3763
excitation, direct vs. indirect, 3753
extract, depressors in, 5699
fatigue, 1309
caffeine and, 502
force and velocity, 1321
frog, sympathetic effects, 2773
heat production, 2268, 4362, 4377, 5705
labyrinth and, 799
latency time, 3224
length and energy cost, 3237, 3243
lengthening reaction, 3193
oxygen supply during work, 2774
poikilotherm, and respiration, 2778
poisoned, lactic acid metabolism, 2276
potential, 2785
reflex, 3731
response size, and stimulus strength, 3743
types, 500
sense, 5612, 5628
shortening, frog, 2263
skeletal, inhibition, 5693
latent period, 4405
sound, 3226
staircase phenomenon, 1762
stimulation, 4356
through solution, 512
strain and time perception, 4285

strength, mollusk, 2823
striate, and sympathetic, 3710, 3725
control, 4390
tension and behavior, 96
glare and, 4288
irritability and, 505
performance and, 2266
quality, 95
time relation and nerve diameter, 2748
tone, 4368, 4380
bulbocapnin and, 94
facial, 1318
twitch threshold, 5720
work, 2784
protein metabolism and, 1800
(See also *Tonus, Tremor*)
Museum service, 21
Music, 2473, 3477
ability, 504, 2029
heredity and, 2319, 3805
race differences, 3032
appreciation correlations, 1452
test, 4671
bowing style, 3490
capacity, heredity, 1851
test, 5975
child life and, 4760
composer, popularity, 5962
composition, 2019
conducting, 5918
creation, 298
development, 2538
education, 5958
family romance in, 5804
form, 5970
expression and, 4001
frequency, 3679
in hypophrenia, 2450
Indian, 233, 2933
interpretation, 245
Japanese, 2532
jazz, 5959
learning, 4360
meaning, 4685
memory and kinesthesis, 2744
mountaineer, 5965
possibilities, 1070
preschool education and, 6110
primitive, 2934
scales, 1508
school, 5960
talent, 726
Africa, 2964
test, 1028, 1059, 5928, 5957
theory, 3475
time, 692
(See also *Melody, Piano, Timbre, Tone*)
Mutilation, self, 4556
Myopia, 1233, 3641, 3670
cause, 1686
compositor, 1696
correction, 3659
school, 2235
Myth, 4004
fire, 149, 2843, 2847
(See also *Folk-lore*)
Mythomania, 3900
compensation, 3909

Name, memory for, 2246
Narcissism, 3322
Narcolepsy, 3431
child, 617
ephedrine and, 616
hyperinsulinism and, 4569
Narcosis, avertin, 3837
rat, 2793
of receptors, 3141
reflex in, 5719
skin resistance, 4404
therapy, in psychosis, 2438, 3382
(See also *Drug*)
Nation differences, feeling, 745
inferiority, 2956
National Institute of Industrial Psychology, history, 723
Research Council, history, 5596
Nationality and body type, 3053
delinquency and, 3444
Need, 3242
economic, and psychopathy, 2423
psychology of, 5707
Negative attitude, 5821
Negativism, 1433
Neglect of child, 4093
Negro ability, 2012
adolescent, intelligence, 2459
attitude and education, 1979
boy, delinquent, 1974
child, 2085, 2505, 2588
community of ideas, 4666
crime, 1021
epilepsy, 645
family, 1985
fertility, 4665
intelligence test, 2668
migration, 250
mongolism, 4598
music talent, 2964
psychosis, 1428
religion, 2980
speed of reaction, 5944
student, 2103
Nembutal in psychosis, 618
Neologism, significance, 3371
Neonate, responses, 6021
Nerve action, 1267, 3716
animal, 3779
current, 3199, 3200, 3723
lactic acid in, 5669
model, 3206
alcohol block, 5683
alteration, 2755
altered, anodal depression, 3221
electrical effects, 3220
areas, skin, outlining, 3215
auditory, Wever-Bray effect, 1682
center, *Hydrophila*, 3720
chemical wave transmission, 1745
chronaxy, 511
colloid, charge on, 3197
psychosis and, 4584
conduction, snail, 5676
velocity, 4340
control, antibody production, 2371
digestion, 1738
respiration, 2267
cortex vs., action current, 1734
cranial, 1737
root function, 3706
syndrome, 4562
crustacean, heat production, 5660
current, 3217
degeneration, catfish, 5743
monkey, 5665
diameter and time relation, 2748
dilation in solutions, 3194, 3201
discharge, sympathetic, 4329
disease, peripheral, 3914
disorder after anemia, 4618
drug effects on, 5671
excitability, 1751, 1752
crab, 3772
testing, 3763
excitation, 1264, 1275, 4350
fiber, myelinated, 1268
vasodilator, 2254
frog, veratrine effects, 5670
function and type, 1280
glycogen content and activity, 1287
growth, 5688
heat production, 848, 5659
impulse, 1729, 3673
cardiac, 1276
chemistry, 88, 5663
deflection, 2754
earthworm, 5668
fish, 3284
heterochronism, 1741
nature, 4344
sensation and, 3672
single receptor, 85
skin sensitivity and, 488
speed, 3195
summation, 4331, 4332
time relations, 2265
velocity and fiber diameter, 4348
injury, 4352
central, 981
peripheral, 4608
instinct and, 3718
lesion, sensation in, 846
light effects, 3205
-muscle unit, excitability, 5673
system and parasympathetic, 5658
time relations, 1750
optic, disease, 4557
oxygen consumption, 3722
pain, 1743
touch and, 5674
pathology, 5844
textbook, 4613
peripheral, conductivity, 2756
physiology, 3727
polarity, 83, 3724
processes, chemistry, 3219
recurrent, paralysis, 985
resistance, frog, 2753
resonance, 3222
respiration, 87
response, *Limulus* eye, 2805
roots, dorsal, and sweat secretion, 2259
section and pruritus, 1731, 1732
sensory, 3211
splanchnic, functions, 1733
stimulus, electric, 4353
summation, 3209
strength, duration curve, 5677
structure and function, 5664
supply, alpha substance, 4351
bird wing, 5750
larynx, 1326
muscle tonus, 4380
pupil reaction, 2199
reflex, 3252
salivary gland, 3704
stomach, 494, 4334
taste bud, catfish, 5635
survival and activity, 4328
system, 3726
activity forms, 497
autonomic, 4343
galvanic reflex and, 4449
capacities, 3719
central, action currents, 5678
evolution, 1753
histopathology, 845
inhibitory type, 4355
moth, 2822
physiology, 2258
poisoning, reflex activity and, 5678
unitary behavior, 3191
vegetative, heat and, 495
influence on, 3192
pathology, 4337
terminals, cord, 849
threshold, frog, 3190
vagus, 490
(See also *Autonomic, Axon, Brain, Chronaxy, Cord, Dorsal, Neuroglia, Neurology, Neuron, Parasympathetic, Refractory, Sympathetic, Vagus, Vegetative*)
Nervousness, 2910
prevention, 5855
(See also *Neurosis, Neuroticism*)
Neuralgia, 2387
facial, 2920
lumbo-ischial, 1421
psychoanalysis of, 203
Neurasthenia, 208, 952, 3377, 5911
fatigue, 5883
gland therapy, 2881
psychoanalysis of, 5813
Neuroglia, invertebrate, 1747
Neurology of anemia, 2924
history, 1278
report, 188
review, 850, 2258
textbook, 86
Chinese, 493
Neuron, function analysis, 844
Neuropathy, headache in, 977
Neurosis, 637, 982, 1922
abstinence and, 2363
accident, 2446, 4625
adjustment, 205
anxiety, 924, 5802
character, 5811
child, 1093, 3527
colitic, 4527, 4580
compensation, 5864
conditioned reflex and, 2905
conscience in, 971
crime and, 1016
culture and, 601
delinquency and, 4746
diet and, 1939
endocrine and, 1941
experimental, 2440, 4450
false judgment, 1063
family, 2401
functional, 4479
gastro-intestinal, 1925
genital, 1959

guilt feelings and, 2420, 3338
hemorrhage, 2383
literature and, 590
money and, 3865
motive, 2422
nasal, 4628
nightmare and, 4494
occupation therapy in, 5886
organic, 992, 1392
physician, 923
problem, 3390
psychoanalysis and, 916, 2357
respiration, 1934
review, 5870
Rossolimo profile, 1418
situational, 957
social relations and, 1399
source, 941
sympathetic in, 206
therapy, 1957
thyroid, 627
vomiting in, 2350
(See also *Nervousness, Obsession, Psychoneurosis*)
Neuroticism correlations, 1375
efficiency and, 1086
goiter and, 2917
prison personnel, 1411
psychosis and, 2444
scale, 1185
revision, 1645
woman prisoner, 1463
(See also *Nervousness*)
Newspaper in adolescence, 3513
(See also *Press*)
Nictitation, 2225
pigeon, 535
Nightmare, 1882
anxiety neurosis and, 4494
(See also *Dream*)
Nitella, action current, 4429
Noise apparatus, 3614
effects, 724
frequency, 3679
measurement, 3644
apparatus, 4240
aural, 821
test, 201
weaving and, 724
work and, 449
(See also *Audition*)
Nomogram, 2659
construction, 1614
Nonsense syllables, comparative retention, 4397
Nordenskiöld, E., obituary, 5949
Norm, 1374
Normal curve, discovery, 4882
transformation, 2086
equation, solution, 372
Normalism, 3283
Normality, mental, 4626
psychoanalysis and, 1876
standards, 2849
(See also *Defect*)
Nose mucosa in alcoholism, 5726
psychogenic disorders, 4628
Nostalgia, see *Homesickness*
Nudism, 2865, 3850
Number forms, child, 4792
sex significance, 3327
Nurse, reeducation duties, 2912
tests, 1521
Nursery school, 1156, 4813
costs, 2143
intelligence and, 3106
(See also *Preschool*)
Nursing, mental hospital, 2911
mental hygiene and, 2916
psychology in, 1962
psychosis and, 196
Nystagmus, 446, 447, 1218, 1240, 1241, 3230
alternate, 4537
apparatus, 1760
cornea reflex and, 2780
deaf mute, 878
eye muscles and, 885
opposite lesion, 4536
optokinetic, 437, 2279
prevention, 1242
selective abolition, 3734
thyroid and, 520
vestibular, 2789

Obeah, 2980
(See also *Fetishism*)
Obesity, child, 2910
Obituary, Betz, W., 402
Brush, E. N., 3607
Downey, J. E., 1213
Ferenczi, S., 5823
Frey, M. v., 4
Grünbaum, A. A., 411
Hazlitt, V., 3134
Höffding, H., 23
Kline, G. M., 3615
Lipps, G. F., 403
Mignard, M., 4597
Nordenskiöld, E., 5949
Troland, L. T., 383
Weiss, A. P., 413
Wundt, W., 4229
Object identification, child, 4083
Objectivity, comparative psychology, 5747
psychology, 1661
Observation blank, 1656
board, 1679
imagery and, 61
reliability, 679, 2025
Obsession, 961, 3960, 3898, 5843
amnesic suicide, 2880
anxiety, case, 2889
magic, 5812
paranoia and, 214
parkinsonism and, 3366
psychotherapy of, 4533
(See also *Compulsion*)
Occultism, 1360, 1370, 1871, 2335, 2844, 2850
animal, 3780
case, 583, 166
controversy, 3858
deception, 165
motivation, 1368
possibility in, 3859
psychopathy and, 5874
religion and, 266
spirit photography, 2838
status, 5786
test, 2815
(See also *Clairaudience, Clairvoyance, Divination, Dowsing, Mediumship, Telepathy*)
Occupation and age, 3486
background, hypophrenia, 2439
distribution, 3974
Germany, 1984
family vs., women, 1015
guidance, 2541
hypophrenia, 3924
intelligence, education, 3506
interest, simulation, 4205
twins, 1342
judgment of, 2348
mobility, 1047
neurosis, 957
parent, child preference and, 4781
selection, 3584
testing, 5989
employment and, 5986
therapy, 1930, 1948, 2429, 4544
dramatics, 3407
hypophrenia and, 672
interest, 620
library, 1391
neurosis and, 5886
psychiatric aspects, 4535
psychosis and, 1430
training and, 3585
(See also *Vocation*)
Odor blindness, 1687
(See also *Olfaction*)
Oedipus complex, 2332, 4518
conflict, symbolic resolution, 5971
Oestrus and diet, rat, 543
Office illumination, 3165
work, hygiene, 5999
worker, child of, 4064
Old age, see *Senility*
Olfaction apparatus, rat, 4252
cerebral trauma, 5866
disturbance, 2230, 2727
impaired, 5610
loss, hereditary, 5770
parosmia, 825
quality judgment and, 4728
reflex, 5626
terminal nerves, 82
testing, 3139
threshold, 1697
turtle, 3292
(See also *Anosmia, Odor*)

Operative, character of, 2360
Opinion in attitude scale construction, 1179
change, social influence, 3464
divorce rate, 2490
group vs. expert, influence, 4686
prosperity, 2951
public, 4648
(See also *Attitude, Belief, Propaganda*)
Opossum, brain, 111
diencephalon, 1810
Optic cortex response, rabbit, 1271
strychnine and, 1269
nerve stimulation, rabbit, 1270
pathway, rabbit, excitability, 1273
Optics, instruments, 1201
Optometry in education, 42
Oral eroticism and poetry, 5789
Organism, directive influence on, 17
Organization, biological, 5604
conceptive, 2245
work, 1519
Orientation, 117, 3241
animal, 3777
ant, 3293
buildings, 297
child, 2034
disturbance, psychasthenia, 2886
insect, 3305
light, insect, 3771
lower levels, 79
maze, rat, 2827
mouse, 4445
person, 3899
pigeon, 3295
rat, 1340, 1826, 2776
vertical, 3681
visual, 3634
(See also *Direction*)
Orphanage, character effect, 6031
Orthopedics, review, 850
Oscillograph, 3617
technique, 3107
Osmosis through skin, 888
Otitis after scarlet fever, 803
Otosclerosis, heredity, 901
Overlapping in psychology courses, 4149
Ovulation, 2318
control, rabbit, 1282
(See also *Menstruation*)
Oxycephaly, 2388
Oxygen consumption of muscle during work, 2774
nerve, 3722
deprivation effects, 3853
(See also *Anoxemia*)
Oyster, chemical sense, 4442

Pain, 2629, 2660
adaptation, 2203
cold and, 2738
coronary occlusion and, 454
exercise and, 1307
fibers, 5674
heat and, 2737
localization, 4283
nerves, 1743
physiology, 1689
pressure sense vs., 3150
referred, 498, 3675
reward to, in conditioning, 5706
sensation, 5638
sensitivity of arteries, 3661, 3662
susceptibility, differences, 817
temperature sensations and, 4274
threshold apparatus, animals, 3612
Palate, cleft, 2981
post-encephalitic, 4605
values in adenoids, 2018
Panting, 5704
Papilla, optic, choked, 624
Parabiosis, 3705
Paralysis and learning, 3281
recurrent nerve, 985
(See also *Hemiplegia, Paraplegia, Paresis*)
Paranoia, 177, 962, 3894, 3942, 4500, 5858
concept, 2884
crime and, 1973
delusion, 968
epilepsy and, 2872, 5879
hallucinatory, 3368
heredity, 3398
involutional, 215
mania and, 3944, 3945
obsession and, 214

personality and, 3397
psychoanalysis in, 189
Paraphrenia, 3369
Paraplegia, flexor reflex in, 1769
(See also *Hemiplegia, Paralysis, Paraplegia*)
Parapsychology, see *Occultism*
Parasympathetic center in diencephalon, 5666
effects on sympathetic, 2747
neuromuscular system and, 5658
Parathyroid and body temperature, 5721
Parent adoption, 1553
age and mongolism, 5894
attitude and child personality, 4754
mental hygiene and, 4089
and child, 746, 4759, 4775
adjustment, 4758
education, 1131, 2111, 3539, 4057, 4061, 4074
bibliography, 4823
college and, 1138
methods, 4086
vocation, child intelligence and, 5759
(See also *Mother*)
Paresis, 1422
case, 3412
child, 2391
delusion, 675, 4588
malaria therapy and, 3426
genius and, 3356
handwriting in, 4582
infantile, case, 2918
prognosis, 4621
responsibility in, 4579
test, 5850
methods, 5851
(See also *Hemiplegia, Paralysis, Paraplegia*)
Paresthesia, 4550
Parkinsonism, 2904
obsession in, 3366
trauma and, 4530
Parole in hypophrenia, 2389, 2427
Parrakeet, color vision, 3269
Parrot learning, 2301
Parsimony, law of, 2180
Part and whole, 5606
Passion, 5647
Passivity, 1765
Pathology, social, 2477
Patient, attitudes, 2915
Patriotism, 3463
Pattern discrimination and brain area, rat, 1333
Pavlov system, critique, 2274
Peace education, 353
Pedophilia, case, 2349
Peduncle lesion and hallucinosis, 3927
Pellagra and psychosis, 5853
Percentile ranks, 3088
Perception, 444, 3691, 4266
adaptation in, 3146
area, 2709
conditioned reflex and, 1785
depth, 1700, 3653, 3657
development, 1566
form, 2212
child, 3006
size and, 5630
visual, 2704
momentary, 2705
perspectives, 5624
relations, monkey, 4458
research methods, 36
size, 3135
small figures, 3684
space, 2237, 3630, 4267, 4272
thought and, 4290
time differences, 3162
measurement, 5636
time and muscle strain, 4285
visual, speed, 4295
words in reading, 4707
Performance and muscle tension, 2266
preference in arithmetic and, 4805
quality and muscle tension, 95
rhythm and sleep, 3842
test, 4886
child, 3589
Periodicals, child guidance, 4063
Periphery, color vision, 1708, 2714
movement perception in, 2735
Perseverance and success, child, 2000
Perseveration, 797
character and, 3101
psychosis and, 3102
schizophrenia and, 2914
suggestion and, 4498
Persistence, rat, 2808, 2809
Personal equation in rating, 371, 2337
Personality, 159, 1356, 1358, 3845, 3324
accident and, 284
adjustment, 4516
correlations, 1369
adolescent, 3003
approach, 593
art and, 237, 1878
ability and, 230
atheists, 1905
Baskirtseff, M., 1014
blind child, 4771
body type and, 3413
Brahms, J., 3840
business, 2549
Carossa, H., 6022
catatonia, 946, 947
child, 2068
experience and, 610
socio-economic factors and, 4754
study of, 739
method, 3556
color sense and, 3642
vision and, 2218
crime and, 228, 1989
culture level and, 3481
deafness and, 1908, 2129
determinants, 1377
literature, 3318
development, 386, 576, 1380
diagnosis, experimental, 5833
difficulty, child, 3546
dissociation, 162
doctrine, Spinoza, 5598
environment and, 4213, 4515
error and, 1879
excitable vs. inhibitable, 2418
family resemblance, 124
food habits and, child, 4753
foster child, 2071
Gandhi, 3004
glands and, 598
Goethe, 697
good judge of, 2379
group judgment, 2372
heredity and, 4473
humor and, 143
Indian, 3436
infant, 6042
intelligence, scholarship, 4112
intercorrelations, 920
interest and, teacher, 2616
investigation, 2338
Jesus, 3448
learning and, 1888
Lincoln, A., 2336
motor set and, 5715
Napoleon, 5783
negro boy, 1974
norms and differences, 594
paranoia and, 3397
popularity and, boy, 3529
pre-psychotic, 1425
preschool child, 2089
Pressey test and, 4489
principles, 3830
psychology course and, 2699
pulse and respiration, 928
questionnaire, 3466
rating, child, 1540
review, 3852
scale, 1185
Bernreuter, validity, 3588
scholarship and, 1128, 4857
school and, 4872
school of psychology and, 592
self rating, 1354
society and, 3873
study, 596, 1900, 6126
outline, 932
statistics and, 1887
stuttering and, 3967
teacher, 4126, 6081
test, 611, 2861
clinics, 1892
differential factors, 1382
intercorrelations, 3869
review, 5828
twins, 907
unconscious and, 5792
vital, 5788
voice and, 4690
weakness, 2841
woman, 1873
work, 2987
(See also *Adjustment, Character, Introversion, Temperament*)
Personnel, 1522, 4740
administration, 4741
business school, 1087
counseling, 1152
depression and, 1080
education and, 1594
selection, 1520, 1525
service, teacher college, 2146
work, psychologist, 4861
teacher in, 1605
(See also *Selection*)
Perspective, perceptual and memory, 5624
reversible, rate, 5632
test, 2100
Perversion, 4546, 5796
Peyote cult, 2537
Phallus, body as, 3848
Phasmid autotomy, 3301
heat sensitivity, 1808
Phenomenal regression, 3166
Philosophy, aspects, 3610
bibliography, 4220
child, 4763
civilization and, 3133
compendium, 3122
contrariety and, 3113
education and, 1536, 2648
Höffding, 1677
India, 1202
mental hygiene and, 2898
personal, 1894
presuppositions, 4224
realism, 1210
Rousseau, 1606
science and, 2678
student, 2534
symposium, 2194
textbook, 1652
(See also *Spinoza*)
Phobia, child, 306
cyclothymia and, 2879
(See also *Fear*)
Phonetic symbolism, 2461, 2512
Phonetics, 1464, 2027
Photograph, prediction from, 4744
Photoptometer, 5581
Phototropism, *Daphnia*, 1842, 4435
plant, 120
Phycomyces, growth, 527
Phyloanalysis, 3453, 3892, 4650
Physical disability and intelligence, 3061
training, hypophrenia, 2430
Physician, colonial, adaptation, 1927
Physics and mathematics, college, 2632
disability, 757
Physiognomy, 2846
Physiology, child, 2993
Russia, 4419
text, Chinese, 3058
work and, 5993, 5995
Physique and intellect, 1538
intelligence and, 1640
motility and, infant, 4060
muscle tension and, 96
psychosis and, 1918
traits, correlation, 5724
Piano learning, 4360
timbre, 5924
Picture interest, child, 1556
perception, child, 4776
Pigeon, heat changes, 3773
nictitating membrane, 535
orientation, 3295
righting reflex, 3786
vision, 2810, 2811
Pigment change and light, fish, 3291
Pilocarpine and digestion, 1738
Pilot, test, 2782
Pitch and galvanic reflex, 876
grouping, 2227
inflection in speech, child, 2538
time and, 2236
vocal, conditioning, 4414
Pituitary, 4403
activity and, rat, 5745
excess, 2770
pathological sleep and, 516
(See also *Hypophysis*)
Placement, school and delinquency, 4110
Plagiarism, 1445

Planaria, color vision, 532
regeneration, 3273
Plant, geotropism, 546, 1818
growth, 120
inhibition and, 897
movement device, 410
respiration, 898
sleep, 1828
sociology, 889
(See also *Nitella*, *Phycomyces*)
Plato, doctrine of good and evil, 5808
Platyhelminthes, see *Leech*, *Planaria*
Play, 4371
child, 2570, 6039
anger and fear in, 1546
dramatic, of child, 3553
and fantasy, child, 332
in hypophrenia, 2452
material and social behavior, child, 6045
theory, psychoanalytic, 5827
and work, 102
(See also *Recreation*)
Pleasantness and learning, 4305, 4327
retention and, 4306
spelling and, 1584
treatise on, 1718
Pleasure and pain theory of learning, 92
theory of learning, 3757
(See also *Hedonism*)
Poe, psychoanalysis of, 4483
Poetry of adolescence, 333
appreciation, 4835
child and, 1116, 4780
child imagination and, 4664
choice, child, 736
metre sense in, 4673
oral eroticism and, 5789
(See also *Meter*)
Poikilotherm muscle and respiration, 2778
Poisoning, conditioning to, 3735
Poland, child characteristics, 4778
Polarization, nerve, 3724
Police, psychology in, 2026
Poliomyelitis, 1955
Politics, 1443
adolescence and, 4711
attitude, student, 2006
Polydipsia, 3947
Polygraph, 385, 388
Polyneuritis, 5906
Pons, lesion, 5854
Popularity of composers, 5962
personality and, boy, 3529
Population, Dahomey, 246
density and reproduction, insect, 896
optimum, 2959
problem, Italy, 1345
urban, nationality, 222
Pornography in adolescence, 6026
Porteus test in delinquency, 3993
Portraits, psychologists, 2167
Position effects, attention range, 2243
Possibility in occultism, 3859
Posture and chronaxy, 3761
electrical stimuli, 1757
expression and, 1306
head, in catatonia, 4561
red corpuscles and, cat, 489
reversal, 5694
sleep, child, 3020
Potential in muscle, 2785
Potentiometer current source, 3109
Power change in muscle contraction, 3764
Practice, 2275
differences and, 91
distribution, 1263
pursuitmeter and, 4425
effect, 1258, 3268, 4411
duration limen, 3155
post-hypnotic amnesia and, 595
energy cost and, mental work, 483
motor skill and, twins, 2833
work decrement and, 106
(See also *Learning*)
Prayer, school, 2643
Precocity, sexual, 1912
Prediction, high school graduation, 6071
scholarship, 6108
college scholarship, 349, 354, 1583, 3070
success, 4111, 4160, 6073
engineering aptitude, 4722
graphic, 4162
group, 4675
growth, 2996
mechanical ability, 4890
reading achievement, 2114
scholarship, 4818, 4850
engineering, 4155
intelligence and, 4910
success, teacher, 2126
Preference, color, child, 4755
composition, high school, 2107
container shape, 4723
food, 2287
rat, 1848, 2295, 2316
performance and, arithmetic, 4805
rectangle, 1251
size, rat, 2315
student, in psychology, 4855
toy, of child, 2558
vocational, and intelligence, 2543
Pregnancy, attitude in, 3916
hysterical, 1958
Prehension, infant, 730, 734
(See also *Grasping*)
Prejudice, 2942
Preparation, teacher, and subjects taught, 4152
Presbyopia, 1703
Preschool education, bibliography, 4823
(See also *Nursery*)
Press, race attitudes, 690
(See also *Newspaper*)
Pressey test, 4489
Downey test vs., 4899
reliability, 4175
Pressure adaptation, 461
affectivity and, 462, 468
eye, 1247
pain sense vs., 3150
sensitivity, fish, 1807
Primacy, 473
Primate, Babinski sign, 3280
behavior, 3285
delayed reaction, 538, 544
embryology, 2814
grooming, 2313
instincts, 5734
Primitive and abnormal child, 6048
art, 272
economics, 4003
ethics, 1459
family, 1053
feast, 2966
handedness, 4427
ideas, 2035
magic, 2495
mental attitude, 5576
music, 2934
psychoanalysis, 597
psychology, 2945, 5951
religion, 1451, 1472, 1487, 3992
reproduction concepts, 1982
sorcery, 2953
thought, 737, 3184, 5931
tradition, 2015
(See also *Anthropology*)
Principal, elementary school training, 4132
Prison administration, 1010
adolescent in, 1484
congress, 3983
education, 227, 1032
personnel, mental hygiene, 1411
psychiatry in, 3425
psychosis, woman, 3396
Prisoner, attitude toward decalogue, 4703
classification, 5954
mechanical aptitude, 4011
sex life, 3988
woman, neuroticism, 1463
Probability, 1613, 4166
extremes and, 1609
(See also *Statistics*)
Probation, 3457
Problem defectives, success, 4622
hypophrenia, 2404
solving, 4320
ability, 1126
caffein and, 4495
child, 3547
Process psychology, 4232
Prodigy, calculating, 76
(See also *Genius*)
Proficiency, graphology, 1493
Pragmatism, 4215
Progressive teaching results, measurement, 2145
Prohibition attitude, student, 5976
Finland, 2482
Sweden, 2494
Projection in depression, 2852
super-ego, 2866
Projector visibility, 3130
Proletarian speech, 2962
Promotion, mid-year, and adjustment, 4819
school, 3063
Propaganda, 2001, 4684
control by education, 2099
effectiveness, 5923
Russia, 2045
(See also *Opinion*)
Prose appreciation measurement, 3561
sex differences, 4105
test, 1573
Prosperity, opinion on, 2951
Prostitution, 1486, 1996
Protein metabolism and work, 1800
Protensity as dimension, 2168
Protozoa, light sensitivity, 3789
(See also *Ameba*)
Proust, M., esthetics of, 4017
Pruritus, 1685, 3884
nerve section and, 1731, 1732
sympathetic and, 1730
Pseudologia, case, 2349
(See also *Lie*)
Psychasthenia, disorientation in, 2886
Psychiatrist, biography, 2443
Psychiatry, 176, 1947, 1963, 3433, 3896
anthropology and, 3416
bibliography of, 3938
child, 967
congress, Nordic, 1393
constitution in, 3950
crime and, 1069, 1504, 5930
critique, 2876
developments, 2907
education and, 997, 2596, 2887, 4135
in 1830, 3406
eugenics and, 5896
general hospital and, 2894
growth of, 3430
heredity in, 1860
industrial, 2429
internal disease and, 5897
law and, 1488, 2969, 4669, 5964
Sweden, 1419
medicine and, 197, 4596, 4602
prison, 3425
psychoanalysis and, 3834
psychology and, 790, 2893
psychopathology and, 4627
racial, 1956
report, 188
standpoint, 5842
textbook, 5847
training, 3910, 5876
(See also *Psychoanalysis*, *Psychotherapy*)
Psychic Research, see *Occultism*
Psychoanalysis, 27, 585, 599, 1875, 2333, 2836, 2845, 2848, 3320, 3329, 3349, 3351, 3611, 3819, 3820, 3867, 3870, 3874, 3955, 5832
alcoholism, 3323
anthropology and, 580
autobiography and, 2339
case, 163
studies, 147
catharsis and, 590, 678
cause and, 2366
Chicago Institute, 1866
child, 1367, 1385, 1880, 2992, 3039, 3839, 6015
guidance and, 965
clinical, 145, 2344, 5796
crime and, 1006
critique, 1902, 3861, 4502, 4507, 4513, 4518
culture and, 2478
dentistry and, 2352
drug addiction, 3345, 5799
education and, 2138, 2611, 3580
epilepsy and, 2421
ethnology and, 3458
epistemology and, 13
erythrophobia, 5829, 5834
estimate, 154
forerunner, 161
Goethe and, 1373, 1891
group, 3453
history, 917, 5806
hypnosis vs., 1388
hypochondria, 5798, 2393
hypophrenia and, 2394
instinct doctrine, 1901
interpretation in, 571

law and, 1465
literature and, 1447, 5805, 5785
medicine and, 2370, 5791
mental hygiene and, 5865
ministry and, 234, 242
neuralgia, 203
neurasthenia, 5813
neurosis and, 916, 2357
normality and, 1876
note-taking in, 911
outline, 3831
paranoia, 189
Poe, 4483
primitive, 597
culture, 164
psychiatry and, 3834
psychology and, 4482
rapid, 2355, 2373
relaxation method, 2325
religion and, 4520
resistance in, 170
science and, 2365, 3833
scientific nature, 4490
shame and, 1893
social psychology and, 4491
reform and, 1364
work and, 4615
status, 609, 1874, 3849
telepathy and, 3808
terminology, 3330
undoing mechanism, 156
value in, 602
woman and, 1865
(See also *Anxiety, Castration, Compensation, Complex, Compulsion, Dream, Freud, Guilt, Libido, Masochism, Obsession, Oedipus, Oral, Phobia, Psychiatry, Psychotherapy, Regression, Repression, Unconscious*)
Psychogenesis of disease, 3952
Psychologist, attitudes, 1211
portraits, 2167
rating scale, 2185
training, 3518
Psychology, 3984
abnormal, textbook, 3367
workbook, 652
animal, 1325
human vs., 4465
anthropocentrism in, 2702
anthropology division, National Research Council, 5596
aspects, 5600
bibliography, 2676
biology and, 5589
Buddhistic, 3124
China, 22, 3132
chronicle, 3
classification, 422
clinical, in medicine, 1474
comparative, objectivity, 5747
concepts, 28
course, introductory, 4115
personality in, 2699
doctorates, 798
educational, 2182, 2623, 2653, 4100, 4133, 4137
bibliography, 6064
objectives, 4108
outline, 1601
experiment in, 1674, 3112, 3114, 3123, 3125, 4227
first course, 4237
gains, 3571
foundations, 5595
functional, 1649, 3604
general, 3618
genetic, 2122
Germany, 5590
Hindu, 4250, 4251
history of, 2695, 5575
Herrick, C. J., 1187
individual vs. *verstehende*, 2188
industrial, 2063, 4742
institute, 2176
journal, Rumanian, 3129
law and, 3979
review, 4692
learning of, 4836
lecture, 3111
critique, 4121
literature of, 1199
manual, 25
medicine and, 1410
method, 404, 785
modern, 8
in 1932, 5588
objective, 1661
outline, 3115
popular, 1648, 1666
practical, 412
principles, 1660, 3609
of process, 4232
psychiatry and, 790, 2893
radio talks, 1669
response, 2691
review, 2178
Sanskrit, 791, 792, 793
school of, 6
in school, 2624
scope, 4219.
situational, 5580
social, 2491, 2954, 2955
problems and, 3602
in U. S. A., 1966
South Africa, 2189
special, 1665, 2174
status, 2179
student preference in, 4855
system, 18, 3611
systematic, 1671
teaching, efficiency, 4140
methods, 4814, 4837
terminology, 1650, 2689
test, 1145
textbook, 19, 780, 1658, 1675, 3126, 3616, 4234, 5586, 5591
theoretical, 786, 1657
topics, interest value, 4117
treatise, 414, 1654, 3117
trends, 3606
type of, 2166, 2190
understanding vs. individual, 796
volition study and, 29
work-book, 1192, 1197, 1672, 3119, 4236
Psychoneurology, Russia, 1290
Psychoneurosis, 5882
Rorschach test in, 1641
(See also *Neurosis*)
Psychopath, ennui in, 3913
Psychopathology, 3951
criminal, 5941
economics and, 686, 1458
meeting, 4570
principles, 210
psychiatry and, 4627
Russian attitude, 1436
social, 1406
test in, 4888
theory in, 182
(See also *Psychiatry*)
Psychopathy in adolescence, 3405
crime and, 1454
delinquency and, 273, 3996
genius and, 3391
literature and, 3814
need and, 2423
occultism and, 5874
Rorschach test in, 3378
Psychophysics, 4262
absolute method, 34
unit method, 5609
audition in, 442
constant stimuli method, 827
definitions, 459
industrial applications, 4745
mental work and, 4883
tables, 2660
three variables, 4293
touch in, 443
vision in, 441
Weber law, 804, 3169
Psychosis, acid-alkali balance in, 3963
adjustment and, 4532
age and, 4639, 4640
alcoholic anxiety, 1415
anticipation in, 5889
autosuggestion in analysis, 5836
biochemistry and, 4611
blood count, 4601
sedimentation in, 219
sugar in, 669
brain function in, 2411
care, 193, 951, 978, 988, 998, 1427, 3936
England, 4592
Japan, 3961
Scotland, 2878
South Africa, 3890
Sweden, 982
cases, 4568
causes, 3892
child, 3537
development, 218
classification, 2890, 3953
climacterium, 635
contributing causes, 5875
cortin therapy, 2413
crime and, 1500, 4578
delinquency and, 658
diabetes, 4619
diphtheria, 4630
disease and, 184
economics and, 5862
eidetic imagery in, 1952
emigration and, 656
emotion and metabolism, 1438
encephalitis and, 4624
endocrines and, 969, 2900, 4538
child, 4633
England, 5905
escape in, 3908
eugenics and, 5840
extra-mural care, 663, 665
family, 5774
attitude in, 945
fever therapy in, 198
functional, 5882
galvanic reflex in, 657
genius and, 3312
group treatment, 5881
guilt and punishment in, 3922
handwriting and, 2003, 2466, 2471
heredity, 132, 561, 566, 904, 1350, 3802, 4475, 5762
hospital for, 3926
hydrotherapy in, 2922
imagery in, 1431
incidence, 949, 958
induced, 1394
institutional, 187
Ireland, 698
Jew, 1398
kings and, 1426
law of Belgium, 4560
life expectation and, 3929
literature and, 5887
loss from, 2906
love and, 1949
masturbation and, 646, 647
memory in, 5900
ministry in, 200
mixed, 2390
motor, 638
narcosis therapy, 2438, 3382
negro, 1428
neuroticism in, 2444
nerve colloids and, 4584
nursing in, 196, 2911
occupation therapy, 1430
pellagra and, 5853
perseveration and, 3102
personality preceding, 1425
physical education in, 3904
physique and, 1918
plea in crime, 1960
prevalence, Jews, 3930
prison, conversion in, 1440
woman, 3396
psychotherapy in, 3949
puerperal, 3878, 4593, 4642
punishment and, 2883
race types, 1956
religion and, 183
school adjustment and, 322
siblings, 563, 3803
simultaneous, of twins, 4594
sinusitis, 2382, 2410
sleep and, 607
structure, 3940
suggestibility in, 1387
superstition about, 1420
syphilis and, 964, 4559, 4581
tabes, 2384
teacher, 3933
testimony in, 3698
therapy, 629, 3404
typhoid preceding, 4576
thyroid, 4634
time sense in, 2455
toxic infection, 1403
traumatic, 4541
treatment, 209
tuberculosis and, 2903
twins, 2432, 3314, 5761
types, 3415

unconscious structure, 5885
woman, 668
See also *Apoplexy, Catatonia, Cyclothymia, Delusion, Dementia, Depersonalization, Depression, Encephalitis, Hebephrenia, Hysteria, Insanity, Involution, Korsakow, Mania, Melancholia, Neurasthenia, Paranoia, Schizophrenia, Stupor*)
Psychosynthesis, 1
Psychotechnics, 4716, 4720
aims, 4730, 4739
basis, 4036
behaviorism and, 3498
economy of, 3504
Germany, 6004
railways, 4028
Russia, 4736, 6008
social aspects, 5984
terminology, 4025
test, diagnostic value, 5996
evaluation, 4892, 4902
theory, Russia, 4738
vocabulary, 4026
(See also *Technopsychology*)
Psychotherapy, 584, 637, 931, 996, 1002, 1043, 1437, 1877, 1884, 1959, 1961, 2385, 3819, 3824, 3354, 5807
child, 1917, 5838, 6043
conflict forms and, 2442
crime and, 1983
cyclothymia, 211
Czech, review, 220
differential, 2412
guilt in, 939
history of, 2408
imagery in, 1413
medicine and, 4564
obsession and, 4533
philosophy and, 181
psychosis, 3949
religion and, 926
schizophrenia, 194, 990
superstition and, 5978
technique, 2376
thyroid disturbance, 4599
(See also *Psychoanalysis*)
Puberty phenomena, 2098
praecox, 2559
(See also *Adolescence*)
Puerperium and psychosis, 3878, 4593, 4642
Pulse and electric response, 513
frequency in excitement, 4373
personality and, 928
rate and athletic status, 5695
training and, 5713
(See also *Circulation, Heart*)
Punctuation, 2620, 4118
Punishment, capital, 251, 4657
child, 310
crime and, 1048
guilt and, in psychosis, 3922
ideals and, child, 3021
learning and, 503, 1320, 3186, 4393, 4394
child, 316
rat, 531
psychosis and, 2883
retroactive inhibition and, 3229
school, 6052
serial learning, 2278
state action, 2931
(See also *Crime, Learning, Reward*)
Pupil adjustment, 3562
entrance point and light efficiency, 2729
eye, 3625
home background, 3048
reaction, 3651
adrenin and, 43
innervation, 2199
time, 4275
reflex and adrenalin, 1312
conditioning, 4379
schizophrenia, 2869
size and light intensity, 4271
vision speed and, 808
stimulation, cat, 3303
(See also *School*)
Pupillotonia, 4563
Purple, visual, light absorption, 4279
Purpose, 4246, 5602
Pursuitmeter practice distribution, 4425
Pyromania, 1003

Quadruplets, 123
(See also *Triplets, Twins*)
Quality, 2213, 2216
judgments and sense impressions, 4728
speed and, 374
work and, 2061
Quantity appreciation by child, 4066
Question form and suggestibility, 3818
Questionnaire reliability, 2673, 3095

Rabbit, action currents, 1272
bulbocapnin effects, 4431
cortex areas, 5746
eye illumination, 2807
larynx reflex, 1326
optic cortex response, 1271
strychnine and, 1269
nerve stimulation, 1270
pathway, excitability, 1273
ovulation control, 1282
sex ability after castration, 1338
spinal, reflex, 1305
Raccoon, delayed alternation, 5731
Race attitude, press, 690
student, 4667
consciousness, Jewish child, 3468
contact, 247
degeneration, Africa, 4012
delinquency and, 3444
difference, Africa, 2012
beauty judgment, 1477
child art, 4091
color blindness, 3454
fertility, 1861
Mexican, 1478
music ability, 3032
pain susceptibility, 817
Poland, 4778
reaction speed, 5944
mixture, 901
Hawaii, 1858
mental ability and, 4471
psychiatry, 1956
psychology, 1037
relations, survey, 3989
religion and, 4015
types, behavior of, 1496
Radiation and biological data, 2262
Radio audience, habits, 2986
habits, 4679
influence, 4005
psychology and, 1669
Railway psychotechnics, 4028
Range of attention experiment, 3694
position effects, 2243
distribution, 1620
Rank, intelligence tests, 5570
Ranschburg phenomenon, 296, 1767, 5997
Rapport with child, 4788
(See also *Transference*)
Rat ability measures, intercorrelation, 530
activity and glands, 598
hormone and, 2812
pituitary and, 5745
adrenals, 2772
removal, 1815
amytal differences, 3270
antagonistic habits, 541
anticipation error, 4457
association span, 1844
behavior, review, 5742
blood changes in intoxication, 2817
bone and diet, 3797
brain area and reasoning, 1334
color blindness, 2797
vision, 1335, 4468
compound stimuli, 1811
diet and oestrus, 543
direction tendency, 4430
drive strength, 1843
electric shock and, 2799
electricity sensitivity, 2305
endocrine effects, 2760
feeding, social facilitation, 1817
food preference, 1848, 2295, 2316
form discrimination, 534, 1812
geotropism, 557
handedness and carotids, 547
hunger, 552, 553
hypothesis, 894, 5738
incentive in maze learning, 2289, 2290
infancy, 4443
insight, 1837
laterality, 4456
learning, 2314
castration and, 529
incentive, 2296
reward and punishment in, 531
sex difference, 545
temperature and, 4440
light discrimination, 5732
marking, 556
maze behavior, 1327
drug effects, 1825
learning, 554, 2292, 2293, 2294, 2297, 2826
cord lesion and, 540
diet and, 1836
dilated ventricles with, 3288
elevated, 2291
incidental stimuli, 1832
orientation, 2827
rotation, 1340
movement discrimination, 5733
narcotic effects, 2793
olfaction apparatus, 4252
orientation, 1826
persistence, 2808, 2809
pre-natal behavior, 2804
retina, 2798
running time and goal gradient, 4428
size preference, 2315
studies, 3776
temperature and activity, 560
transfer elements, 2303
vision and brain area, 1333
work output under stimulation, 893
Rating activity in child, 2576
personal equation, 371, 2158, 2159, 2337
personality, child, 1540
psychologists, 2185
reliability, 4691
scale construction, 4735
review, 3599
scholarship prediction, 354
selected judges and, 1386
self, personality, 1354
temperament, 3828
(See also *Judgment*)
Rational learning, comparative retention, 4397
Reaction, alcohol effects, 1371
delayed, idiot, 630
primate, 538, 544
simple vs. serial, 1295
time, 104
age and, 3225
apparatus, 5579
cancer, 4636
child, 4051
choice, 833
chronaxy and, 1739
color, 1705
controlled association, 1260
fear, 292
football, 517, 518
pupil, 4275
sport, 1761
visual, 5631
field and, 1257
Reading, 4006
achievement, prediction, 2114
apprentice, 735
blind and, 1222
brightness contrast in, 455
capacity tests, 3581
capitals vs. lower-case, 4707
child, 339
college student, 6066
direction, 1492
drills, 3566
ease, 705
color of print and, 3461
effects, 1491
eye incoordination, 2725
movement in, 2769, 4370
stuttering, 3991
gifted child, 1567
hypophrenia, 2415
improvement, 1607, 2635, 6068
inner speech in, 5920
instruction, 4862
interests, delinquent boy, 1497
girl, 4796
investigations, 2603, 2619
lip vs. touch, 715
mechanical ability and, 1592
performance, 1137
rate vs. comprehension, 766
remedial, bibliography, 4859
instruction, 3078
review, 4860
sound and, blind, 1683

speed, color effects on, 4708
leading and, 3999
print color and, 3472
type face and, 4000
student, 2613
teaching, 752
blind and, 1140
tension and intensity in, 5622
test, 1599, 2640, 6069
first grade, 4847
primary, choice, 4098
type, 4018
word beginnings, 5937
(See also *Legibility*)
Realism, 4245
philosophy of, 1210
Reality levels and retention, 5650
Reasoning and brain area, rat, 1334
(See also *Thought*)
Recall, 1728, 3691
advertisements, 4714
conditions and, 840
eye movements in, 4370
hypnosis and, 604
language and, 834
recognition and, 469
retention and, 3701
shock effect on, 4326
(See also *Learning, Recognition, Retention*)
Recency, 473
Receptor narcosis, 3141
Recidivism and intelligence, 4701
Recognition, expression, 465, 466
false, 1725, 3332, 4543
recall and, 469
touch and, monkey, 4459
(See also *Learning, Recall, Retention*)
Record organization technique, 5578
Recording testimony, 5942
Recovery in ergography, 3760
Recreation, delinquent boy, 1497
hypophrenia, 3417
studies, 3042
(See also *Play*)
Recresal effects, 5818
Rectangle, esthetics of, 3179
preference, 1251
Rectum, sensitivity, 1749
Red nucleus and posture, cat, 489
Reflection, will in, 93
(See also *Thought*)
Reflex activity and nerve system poisoning, 5678
arc mechanism, 5718
automatic, 3261
Babinski, 5727
back, 3267
bladder, 5690
cat, brain control, 519
changes, epilepsy, 654
child development and, 3025
conditioned, 1319, 3748, 3752, 4254
castration and, dog, 3732
child, 3555, 5696
establishment, 856
extinction rate, 4412
modification, 858
negative, 4392
neurosis and, 2905
perception and, 1785
type and, 108
vasectomized dog, 3733
control, larynx, 1326
cornea and nystagmus, 2780
defense, 2768
embryo, bird, 895
epilepsy, 4553
excitability and thalamus, 1773
extensor, of spinal cat, 1779
eye, 1782
muscle, 514
eyelid, 855
recovery period, 865
refractory phase in, 866
facial, 3232, 5692
flexor, 3740
paraplegia, 1769
galvanic, 868, 1299, 1774, 1788, 2273, 3228, 4374, 5712
apparatus, 391
autonomic and, 4449
blood content and, 882
body type and, 463
cinema and, 2586
emotion and, 3690
learning and, 3181
psychosis, 657
pulse, respiration, 513
tones and, 876
grasping, infant monkey, 3294
infant, and gastric secretion, 2766
labyrinth, in centrifuged guinea pig, 3282
drugs and, 887
lid, and stimulus intensity, 521
light and, 3741
lip, in abnormalities, 4600
muscle, 3731
nature of, 3238
olfactory, 5626
palm-chin, summation, 1781
panting, 5704
patellar, 3737, 3746
ventilation and, 875
phenomena, 3252
phylogenesis, 4369
pilomotor, 2792
plantar, conditioning, 881
pupillary, and adrenalin, 1312
conditioning, 4379
innervation, 2199
refractory phase in, 867
respiratory, 3766
righting, cat, 1286
pigeon, 3786
Rossolimo, 4382
salivary, and thyroid, 1298
scratch, in infant, 3526
spinal, anode and cathode effects, 3248
rabbit, 1305
strength, 552, 553
study, 2272
tendon, absence of, 4563
cat, 3254
unconsciousness and, 5719
vascular, and cortex, 5667
vasomotor, and anesthesia, 508
vestibular, and bulbocapnin, 4431
volition and, 1784, 4401
voluntary movement vs., 3259
wink, 886, 3758
wiping, of frog, 2819
(See also *Knee*)
Reflexology, 789
value, 1310
Reformatory, education, 2952
(See also *Delinquency*)
Refraction, ocular, measurement, 3648
Refractory phase, eyelid reflex, 865, 866
reflex, 867
Regeneration, brain, earthworm, 5739
cord, fish, 2815
planaria, 3273
Regression constants, 1164
cyclothymia, 5910
emotional, in tests, 4898
hypnosis, 5800
linearity, 367
phenomenal, 3166
super-ego, 2866
vision, 2731
Reinforcement in conditioning, 3264, 4378
Relation perception, monkey, 4458
Relativity in grammar, 5917
psychology and, 1659
Reliability, 2154, 4873
child behavior observation, 4787
coefficient, 1611, 4158, 4165
introversion test, 582
judgment, 3598
maze, 416
McCall test, 4187
measurement, 4876
observation, 679, 2025
preschool IQ, 2164
test, 1638
Pressey test, 4175
questionnaire, 2673, 3095
rating, 4691
Stanford-Binet, 4900
test, 4189, 4193
fore-exercise effect, 2612
item, 368
length and, 3096, 4159
Relief work, coordination in, 3480
personnel, 1525
Religion, 224, 243, 271, 1877, 3482, 5807
adolescence, 326, 1114, 2031, 2083, 4090
appeal, 2464
attitude, Jew, 2010
birth rate and, 910
child, 2565
rural, 252
conduct and, 1073
crime and, 1057
criminal, 2463
differences, 1968
education and, 1155
experience, types, 2523
Galton on, 5979
leaders, 2946
magic and, 275
Maya art and, 2935
medicine and, 276
negro, 2980
normality of, 5977
occultism and, 266
origin, 2524
phenomena of, 1448
population, 4663
primitive, 1461, 1472, 1487, 3992
psychiatry and, 267
psychoanalysis and, 4520
psychology and, 274, 700, 710, 1976, 3439
psychosis and, 183
psychotherapy and, 926
race and, 4015
revelation in, 1008
review, 5926
security and, 2520
society and, 1480
values, 3470
training, 2539
(See also *Atheism, Buddhist, Christianity, Church, Jesus, Ministry, Prayer, Revelation, Rite, Shamanism*)
Reminiscence, 4316
(See also *Learning*)
Repeating in college zoology, 4807
Repetition, effect on affectivity, 2241
success and, child, 6037
Report, neurology and psychiatry, 188
Representation by child, 6025
Repression and ambivalence in work, 2554
maternal, 606
religion and, 4015
Reproduction of criminal, 5772
insect, 896
(See also *Sex*)
Reptile, see *Adder, Snake, Sphenodon, Tortoise, Turtle, Viper*
Reputation differences, twins, 3310
Research, child, 1533
educational, 1585, 2618, 2657, 3044, 4107
Australia, 1124
standardization, 4144
hypophrenia, 2403
school system, 1150
social attitude, 2458
training in, 2662
Residence and high school graduation, 6071
Resistance box, 389
clinical, 174
electrical, of tissue, 100
nerve, frog, 2753
psychoanalysis, 170
skin, in narcosis, 4404
Resonance, nerve, 3222
theory, 2202
Respiration and body type, 860
centers and bulbocapnine, 2764
child, 6046
conditioning, 5701
control, 1323
differences at high altitudes, 90
electric response and, 513
knee jerk and, 875
nerve, 87
control, 2267
neurosis, 1934
personality and, 928
plant, 898
poikilotherm muscle and, 2778
reflex, 3766
vagus and, 1791
Response, infant, 4782
psychology, 2691
size vs. stimulus strength, muscle, 3743
Responsibility, 708
impaired, 648
paresis and, 4579
Rest, leucocytosis in, 1778
Retention, 66, 4316
age and, 2746
comparative, 4397

feeling and, 4327
Gestalt and, 479
imagery and, 2742
inactivity and, cockroach; 2299
motor vs. verbal habits, 4424
pleasantness and, 4305, 4306
reality level and, 5650
recall and, 3701
sleep and, 842
review, 5657
value, trade marks, 5992
vividness in, 3693
(See also *Forgetting, Learning, Memory, Recall, Recognition*)
Retina action potential, 5672
components, 5617
blue arcs, 3144
conversion, 3639
examination, 4296
fish, 5623
hereditary defect, 826
illumination, 451
rat, 2798
rivalry in stereoscopy, 5637
sympathetic and, 3152
Revelation, Mormonism, 1008
Review, adult learning, 5723
alcohol, 933
animal conditioning, 5744
character and personality, 3852
tests, 5828
study, 570, 5784
comparative forebrain structure, 852
education, 4830
etiology of hypophrenia, 634
forensic psychology, 4692
galvanic reflex, 1774
grammar studies, 6088
heredity, constitution, 2321
intelligence quotient constancy, 3099
tests, 6123
legal psychology, 4693
literary psychology, 4680
neurology, 2258
neurosis, 5870
objective tests, 2161
orthopedics and neurology, 850
psychology, 2178
in 1932, 5588
psychotherapy, Czech, 220
rat behavior, 5742
rating scales, 3599
religion, 5926
remedial reading, 4860
schizophrenia, 625
sleep and retention, 5657
speed and intelligence, 3093
time estimation, 3683
true-false test, 6121
Reward in learning, 503, 1320, 1794, 3186, 4393, 4394
chicken, 1809
to pain in conditioning, 5706
rat, 531
spread of, 3189
Rhythm, 5918
in culture, 4013
disturbance, 3374
of performance and sleep, 3842
sense in poetry, 4673
speed of work and, 2775
temperature and, 3755
typing, 5990
work, 3501
agriculture, 5994
Righting control, cat, 1286
Rigidity, flexor, spinal cat, 3775
Rite, classification, 1468
Ritual, drug, 580
Rivalry, stereoscopic vision, 5637
Rocky Mountain Branch, meeting, 5573
Rod vs. cone composition, 4299
function, 3682
Romanticism, 2529
Rorschach test, 1182, 1641, 2671, 3104, 6127
in diagnosis, 623, 772, 5567
interpretations, 4191
and mescalin, 5830
with psychopaths, 3378
Rossolimo profile, 1631
in psychoneurosis, 1418
Rotation and eye movements, fish, 5748
response, drug effects on, 2786
sea-sickness from, 4372
Roughness and modality, 1715
Rumania, Cluj psychological institute, 4235
Runaway boy, 6014
Running vs. bicycling, 2771
Russia, brain research, 4349
mental hygiene, 3964, 4617, 4638
physiology, 4419
psychotechnics, 6008
theory, 4738

Sacrifice, 581
to ancestors, 3992
Safety placards, 2038
poster, content, 6002
Salary concepts, 1025
Sales ability, 298
language, 2555
resistance, 3491
Salesmanship, 4034
Salivation, innervation, 3704
smoking and, 524
Salt effects on cortex, dog, 5682
Sampling, 1619, 1621
errors, 6118
Satisfaction, 53
Scale, drawing, 5943
lettering, 4841
social distance, 3965
Schizophrenia, 1005, 1400, 2456, 2902, 3389, 3893, 4575, 5859
affectivity in, 2923, 3877
blood pressure in, 5797
body type and, 3413
cerebral lesion, 4548
child, 983, 3420
chronaxy in, 1291, 2396
constitution in, 4606
delusion, 3423, 4588
deterioration in, 3418
development, 966, 3959
diagnosis, 2895
in 1830, 3406
ear complications, 3402
earlier encephalopathy and, 3375
endothelial system in, 650
epilepsy and, 2397, 3384
ethnography of, 3400
frequency, 1412
heredity in, 3372, 3408, 3958, 5892
hospital discharge in, 1953
hypothesis, 2913
impulse in, 3360
intelligence and, 1414, 2417, 3920
interpretation, 643
paranoid, 5858
perseveration in, 2914
precursors, 4567
psychotherapy in, 194, 990
pupil reflex in, 2869
regression after mastoidectomy, 2398
review, 625
sensitivity in, 1396
sterilization in, 5769
stupor in, 950
therapy, 3432
trauma and, 2451
treatment, 973
tuberculosis and, 2903, 4549
twins, 3355, 3393
(See also *Catatonia, Hebephrenia*)
Scholarship and activities, 2637
aptitude test, 1170
beauty and, 4843
college probationer, 3583
English, 3567
environment and, 6071
grade, intelligence, 4825
high school credits and, 3060
Indian, 2475
intelligence and, 4816
load and, 3052
interest and, 4845
IQ and, 4851
kindergarten-primary majors, 2622
maternal over-protection and, 2579
motivation, index, 755
neuroticism and, 1375
personality and, 1128, 4857
intelligence, 4112
prediction, 354, 1144, 4818, 4850
college, 1583
entrance examination board, 349
engineering, 4155
high school, 6108
intelligence and, 4910
progressive school, 3565
public vs. private school, 2605
sex difference, 4854
smoking and, 574
student, 2600
unemployment and, 4806
variability, 4809
variations, 6087
(See also *Achievement*)
School ability, adolescent, 2147
achievement testing, 2601
adjustment, 2109
deaf, 2129
gifted child, 4620
test, 4143
aptitude test, 2132
board members, attitudes, 3435
child, peculiarities, 2118
clinic, 1121
country, 2128
discipline, 1600
elimination changes, 4124
entrant, handicaps, 3546
hygiene, Sweden, 1101
incentives, 2610
Karl Marx, 6109
marks, 1598
influences on, 4866
memory, 2347
mental hygiene, 2580, 3045, 4870
music, 5960
myopia, 2235
nursery, 4813
personality and, 4872
personnel work, 4861
placement and delinquency, 4110
pressure on, 3074
principal, training, 4132
progress determinants, 4838
disabled child, 4846
progressive, 4826
promotion, 3063
technique, 6097
psychological service, 2624
psychologist, Poland, 6091
punishment, 6052
readiness test, 2112
subjects, factors in, 4867
testing, 2142, 2150
typewriter in, 364
vocational guidance, 3558, 3569
work, 4148
year, divisions, 351
(See also *Class, Education, Principal, Promotion, Pupil, Teacher*)
Science aptitude test, 2153
belief in, 26
doctorates, 5607
instruction and unfounded beliefs, 157
intuition in, 5810
method, 14, 404, 2697
overlappings, 3050
philosophy and, 2678
psychoanalysis and, 2365
social psychology of, 2511
Scientists, distribution, 2681
qualifications, 2688
Sclerosis, lateral, 212
Score combination, 4858
comparisons, 4880
grade equivalents, 4163
Scoring interest test, 4207
test, 1578
Scotoma in migraine, 2204
Scratch reflex, infant, 3526
Seamstress test, 5985
Sea-sickness and labyrinth, 1395
rotation and, 4372
Secret society, Omaha, 2943
Secretary, job analysis, 6010
Secretion, all-or-none, cat, 2260
bile, conditioning, 3240
gastric and fatigue, 1302
and reflex, infant, 2766
Sectioning in German, 4822
languages and, 4844
zoology and, 4849
Security and religion, 2520
Selection, aptitude test, 3509
aviator, 299
civil service, 1088
computer, 2547
criteria, 4037
evolution, 3316

job, 4039
judges, 1386
student, 2127
teacher, interview in, 2982
trade school, 1555
vocational, 2054, 2546, 3489
by college, 6095
worker, 2046
(See also *Personnel*)
Self accusation, 5939
consciousness, 3860
infant, 2097
culture, 930
determination and will, 2364
evaluation, 3823
hallucination, 1424
rating, personality, 1354
Sella turcica lesion, 3947
Semi-circular canals, see *Labyrinth*
Senility, accommodation in, 2713
adjustment in, 3340
audition in, 818
dementia, 1435
hygiene in, 3925
maze learning in, 2788
Sensation, 3157, 3631
color, latency of, 2232
electric stimulation, 430
fluctuations, 1235
measurement, 1692
movement, 37
nerve impulse and, 3672
lesion and, 836
types mediating, 1281
pain and temperature, 4274
theory, 1223
time, 2710, 2711, 2721
touch, 4267
and pain, 5638
(See also *Synesthesia*)
Sense conversion, 4261
defects, 217
discrimination, idiot, 622
disturbances, apoplexy, 1441
function, structure, 1713
latency, 3673
preference and handedness, 3256
processes, central integration, 4338
time difference, 456
vibration, 2200
Sensitivity, auditory, variation, 423
blind spot, 806
duration limen, 3155
eczema and, 4632
electric, and body size, 3160
rat, 2305
fish, 559
fovea, 434
heat, phasmid, 1808
hormone and, 3149
light and, isopod, 3781
Protozoa, 3789
pelvic, 1749
pressure, fish, 1807
special states, 1396
sympathetic and, 1903, 5689
viscera, 1681
Sentence difference, judges, 3455
use, child, 3026
Sentiment and society, 2925
(See also *Feeling*)
Serial learning, punishment in, 2278
Serum and vagus excitability, 5685
Set and learning, 4322
motor and personality, 5715
retroactive inhibition and, 4315
Sex, 236, 2939
ability after castration, rabbit, 1338
alcoholism and, 1923
art and, 3995
audition and, cat, 1805
behavior, 903
bird, 1820
comparative, 2004
insect, 4461
bias, marking, 2634
child and, 4053, 4054, 4073
chromosome and color blindness, 2831
classification, 718
complex, 167
crime and, 702, 1012, 1999
criminal, handwriting, 687
development, 2940
child, 4774
woman, 148, 2840
deviations, 2380
difference, 1633, 5826
achievement, 2651
association, 80
bladder control, 3551
character, 1906
color preference, 3178
delinquency, 2507
emotion test, 4301
geology, 1148, 2148
handwriting, 4712
intelligence, 4045, 4177
memory growth, 472
optional college reading, 6066
pain susceptibility, 817
personality tests, 1382
play, 2570
prose appreciation, 4105
rat learning, 545
scholarship, 4854
school achievement, 2121
wishes, 344
disturbances, 1446
dogmas, 3348
drive, 2375
drug addiction and, 1889
education, 733, 762, 2020, 4057, 4853
adjustment and, 4713
child, 4087
endocrines and, 2280, 2326
ethics, 1997, 2500
glands, antagonism, 1308
effects, 4365
growth, boy, 2577
impotence, 1914
psychoanalysis, 5798
infantilism and crime, 1969
instinct, gland modification, 4363
instruction, 308
life, monkey, 5734
youth, 1551
literature and life, 2369
man, 2024
mammal and, 5815
mosaic, reactions, 1846
neurasthenia, therapy, 2881
offense, 3440
opinions, 2032
pathology, 3923, 5803
perversion, 5796
treatment, 869
physiology, female, 2318
precocity, 1912
prison and, 3988
psychoanalysis and, 3329
psychology, 3325
ratio, correlates, 134
seduction, consequences, 343
selection, see *Homogamy*
symbolism, advertising, 3512
technique, 1991
temperament and, 2345
theory, critique, 912
voice and, 269
(See also *Courtship, Dyspareunia, Eroticism, Erotomania, Homosexuality, Incest, Libido, Love, Marriage, Masturbation, Male, Menstruation, Monogamy, Oestrus, Pedophilia, Pregnancy, Prostitution, Reproduction, Sterilisation*)
Shamanism, 1487
Shame, 1898
psychoanalysis of, 1893
Shark, iris, 3685
Shell shock, 952
Sherrington, C. S., appreciation, 1195
work of, 844
Shock apparatus, 777
confusion from, 4604
electric, tolerance for, 4391
susceptibility, rat, 2799
therapy, 3943
Shoemaker test, 1085
Sibling attitude, child, 6029
jealousy, 3033
psychosis in, 563, 3803
resemblance and age interval, 3309
intelligence, 5758
Mexican and non-Mexican, 232
Sign-gestalt, 4254
highway, 4729
Significance in statistics, 6117
(See also *Meaning*)
Similarity, triplets, 5764
Simulation, 3895
occupational interest, 4205
Sinusitis and psychosis, 2382, 2410
Situation psychology, 5580
Size, apparent, 3658
comparison, 44
form perception and, 5630
memory value, 2248
perception, 3135
preference, rat, 2315
Skewness, elimination, 1165
Skiametry, 3668
Skill, factors in, 873
learning in integrated program, 6076
machinery and, 5988
motor, and aptitude, 2284
rat, 2314
test, 4410
(See also *Habit, Learning*)
Skin, apparent movement on, 2223
chronaxy in special states, 1291
deformation, 4273
localization, 435
nerve areas, outlining, 3215
pain, adaptation, 2203
reflex, 1299
resistance, 868
narcosis, 4404
sensation, 5628
sense, chronaxy, 460
sensitivity, duration limen, 3155
hormone and, 3149
nerve impulse and, 488
special states, 1396
wetness, 3153
sensory fibers, 3211
temperature, 888
attention and, 4313
tenderness in visceral disease, 3163
(See also *Itch, Moisture, Pain, Paresthesia, Texture*)
Skull capacity and intelligence, 1634
deformity, 2388
-face values in adenoids, 3017
fracture and thalamus syndrome, 4528
Sleep, 586, 922, 1363, 3343
activity, child, 3020
afternoon, of child, 2094
center, 925, 3864
child, 6036, 6047
chronaxy during, 4330
depth, 3336
determinants, 3755
disturbances, 1954
habits, 3846
loss and tonus, 921
motility, 1881
cinema and, 2367
temperature and, 5809
narcotic, and skin resistance, 4404
neurology, 171
pathological, and pituitary, 516
performance rhythm and, 3842
physio-pathology, 3863
plants, 1828
psychosis and, 607
recording apparatus, 1678
retention and, 842
review, 5657
risk in driving, 1079
stability and, 3854
temperature and, 3843
theory, 4511
(See also *Insomnia, Waking*)
Sleight of hand, 4710
Smell, see *Olfaction*
Smile, child, 1543
(See also *Laughter*)
Smoking and salivation, 524
scholarship and, 574
(See also *Tobacco*)
Snail, all-or-nothing law, 5676
shell, breaking by bird, 4460
Snake, accommodation, 3791
behavior, 5751
eye, accommodation, 2304
Social adjustment and sex, 4713
aspects, love, 1995
mental hygiene, 4590
science, 2511
attitude, 709
criminal, 2488
research, 2458
student, 2006, 2474, 2497, 2514

behavior, catfish, 4434
child, 4786
play material and, child, 6045
statistics and, 5980
tests, 3975
class, Germany, 714
concept, child, 3010
control, cartoon, 4672
development, child, 3516
distance scale, 3965
ecology, 713, 2008
education, child, 4113
effects, cinema, 2469
engineering, 3970
facilitation, cockroach, 4439
rat feeding, 1817
factors and maladjustmen , 1369
vital indices and, 2957
function, personality, 3873
groups, attitude differences, 2000
images, 4650
influence, 2508
child and, 3013
opinion change and, 3464
instinct, localization, 4399
intimacy, 4014
movement, Korea, 2485
observation techniques, 2025
organization, 1972
participation, child, 3543
pathology, 2477
case, 5932
phenomena, France, 4658
problems and arithmetic, 6058
psychology and, 3602
process, 3483
analysis, 3453
psychology, 277, 2954, 2955
American, 1966, 2491, 5922
psychoanalysis and, 4491
student, 2647
textbook, 681
psychopathology, 1406
reform and psychoanalysis, 1364
relations and neurosis, 1399
science, 5953
curriculum, 6101
service, 4661
studies text, difficulty, 2609
success, problem defective, 4622
trends, U. S. A., 2967
values, art, 4651
identification and, 940
work, 1963
mental hygiene and, 3381
psychoanalysis and, 4615
psychiatric, 3935, 5880, 5952
theses, 1439
(See also *Crowd, Group*)
Society, animal in, 2288
evolution, 1469
Experimental Psychologists, meeting, 387
incest barrier and, 2971
individual and, 5948
insect, traditions, 1840
sentiment and, 2925
Socio-economic influences on child personality, 4754
Sociology, animal, 3770
behaviorism in, 2011, 5916
concepts, 28
handbook, 2978
method, 1993
plant, 889
psychology and, 1451
statistics in, 1967, 5976
Sodium amytal differences, rat, 3270
effects, 972
Soldier, training, 2048
work of, 2052
Sorcery, primitive, 2953
(See also *Magic*)
Soul, 1673
mana and, 1009
Sound contrast, 5633
effects on organisms, 110
filters, 5582
generation apparatus, 1651
localization, 427, 823, 2196, 2716, 2728, 4280, 4297
dog, 115
technique, 5616
loudness and duration, 5621
phenomenology of, 2234
pictures in teaching, 4097
relation as conditioned stimulus, 5708
(See also *Audition*)
Space continuity, 45
estimation, boundary effect, 4289
integration in image, 1759
perception, 1283, 2237, 3630, 4267, 4272
cured blind, 1712
theories, 5643
thinking tests, 3487, 4897
time errors and, 2226
Spanish speaking child, intelligence, 4200
Spasm, facial, 631
Spearman-Brown formula, 4159
Spectrum, continuous, 1699
Speech, 1462, 2473, 3477
age and, 261
aphasia and, 3395
appreciation, 1994
audition by deaf, 811
cleft palate, 2981
correction, 4695
defect, child, 334, 1550
correction, 1502
frequency, 754
hypophrenia, 2426
intelligence and, 4007
treatment, 695, 696
voice training and, 2973
development, twins, 315
disorder, 3456
disturbance in atresia, 979
frequency, 3679
hypophrenia, 2891
infant, 2069
inner, in reading, 5920
intelligence and, 774
learning in infancy, 6023
preschool child, 1532
proletarian, 2962
sound, filtered, 5582
theory, 689
therapy, 1975
variations, 3459
work and, 4647
(See also *Bilingualism, Dialect, Language, Lisping, Phonetics, Stammering, Stuttering, Voice*)
Speed, accuracy in work and, 3507
excellence of work and, 2061
factor in mental tests, 3591
intelligence and, 771, 773, 1174, 1180, 3597
child, 3046
review, 3093
quality and, 374
race differences, 5944
typing rhythm and, 5990
work, 2775
visual perception, 4295
work, 1084
Spelling ability and intelligence, 4154
curricula, 1576
errors, 1129
pleasantness in, 1584
tests, 4096
vocabulary, 2630
Sphenodon, eye structure, 1827
Spinal parasympathetic and gastro-intestinal movement, 2750
Spinoza, personality and doctrine, 5598
Spleen contraction mechanism, 5684
dilation, 1772
Sport, reaction time in, 1761
(See also *Athletics*)
Spranger, pedagogy of, 6092
Spread of reward influence, 3189
Squint, 46, 5611
correction, 3667
(See also *Strabismus*)
Stability, lack, 3851
sleep and, 3854
(See also *Adjustment*)
Staining, intra-vital, 84
Staircase phenomenon, muscle, 1762
Stammering, cure, 869
intelligence and, 5933
Stanford Binet test, evaluation, 1181, 4206
reliability, 4900
Station master, test, 4027, 4027
Statistics, 370
bibliography, 6116
case records vs., 5982
comparison of coefficients, 1618
determinants in, 3090
medicine, 369
personality study and, 1887
science, 3084
significance in, 6117
social behavior, 5980
sociology, 1967, 5976
symbols, standardization, 4885
teaching, 3586
terminology, 4167
textbook, 4877
(See also *Averages, Contingency, Correlation, Criterion, Curve, Determinant, Difference, Error, Frequency, Graph, Linearity, Matching, Mean, Nomogram, Norm, Normal, Percentile, Probability, Rank, Regression, Reliability, Sampling, Skewness, Spearman-Brown, Sums, Tetrad, Validity, Variability, Variance*)
Statocyst of amphipods, 3799
Stature and nationality, 3053
Status, intelligence and information, 1099
Steadiness and emotion, 874
measurement, 5599
Stenquist test, prognostic value, 4890
Stereoscopy, 1239
effect, 3158
retinal rivalry in, 5637
Stereotype, 2503
child ideals, 738
Sterilization, 127, 133, 4478
eugenic, 569, 1852
libido changes and, 3353
schizophrenia, 1953, 5769
U. S. A., 1849
Stern Festschrift, 3620
Stigmatization, 2854
case, 3446, 3467, 3484
Stimulation apparatus, 795
equivalent, in learning, 480
excitation and, 3767
faradic, and work output, rat, 893
Stimulus, chance order, 2684
compound, isolability, 1811
duration and chronaxy, 4336
electrical, for movement, 1757
emotion and, child, 2096
incidental, maze learning, rat, 1832
intensity vs. duration, 4353
strength in conditioning, 4407
response size vs., muscle, 3743
summation, nerve, 3209
temperature, 1236
Stomach acidity, work and emotion effects, 99
innervation, 494, 4534
motility inhibition, 3788
insulin and, 3253
neurosis, 1925
secretion and histamin, 2765
vagus, reversal, 2253
Strabismus, 46
twins, 1717
(See also *Squint*)
Strength and age, 4418
weight, insect, 2813
Stroboscope, 3608
Structuralism, 3611
Strychnine and optic cortex response, 1269
tropism and, *Daphnia*, 528
Student, adult, interests, 4828
attitude, 2006
China, 3047
toward decalogue, 4703
color preferences, 5648
educational preferences, 2104
English, remedial, 753
home economics, 2108
intelligence, 2156, 3574, 3593
correlation, 1593
test, 2113
interests, 4802
judgment on class size, 4801
knowledge of library, 4130
liberalism, 1039
load, 1154
scholarship, and intelligence, 3052
Marxists, 2499
mathematics disability, 757
motivation, 755
negro, 2103
philosophy, 2534
preferences in psychology, 4855
prohibition attitudes, 5976
race attitudes, 4667
reading, 6066
scholarship, 2600
selection, 1527, 2127

social attitude, 2474, 2497, 2514
social psychology, 2647
superior, 4844
encouragement, 4815
German, 4822
special work, 4842
superstitions, 2151
teacher-college, vs. liberal-arts college, 2125
transfer vs. "native," 2607
vocational choice, 725
guidance, 6005
war attitude, 1980
(See also *College*)
Study methods, 1125, 6090
principles, 2633
remedial instruction and, 2656
time, college students, 2613
Stupor, hysterical, 1926
schizophrenia, 950
Stuttering, 213, 682, 3442, 3451, 5925
concomitants, 688
handedness and, 3258
intelligence and, 5933
personality and, 3967
reading eye movements in, 3991
tremor, 1040
Subject in biology, 2700
Sublimation, 2857
delusion and, 169
male, 2024
Substitution acts, 5714
Success, clerical, 2985
college, prediction, 6073
education and, women, 6107
failure feelings and, 53
high-school leadership and, 6060
marriage, distribution, 5919
perseverance and, child, 3000
prediction, teacher, 2126
problem defectives, 4622
repetition and, child, 6037
teacher college, 6098
Suggestibility, diurnal variations, 4497
eidetic imagery and, 5787
exaggerated, 4499
hypnosis, 1361
psychosis, 1387
question form and, 3818
Suggestion, 573, 4484
advertising, 3495
child, 6051
facilitation by, 3335
group, 3331
habit and, 4498
hypnosis and, 2327
ministry and, 234
retroactive inhibition and, 3187
test, 605
therapy, 1928
Suicide, 2504, 3449, 3978
amnesic, in obsession, 2880
determinants, 4676
handwriting, 2476
journal on, 2187
Minneapolis, 4698
woman, 5981
Summation, palm-chin reflex, 1781
Sums, correlation of, 6115
Sunfish, acid stimulus, 3276
Super-ego, regression in, 2866
(See also *Conscience*)
Superstition, child, 1460
college student, 2151
psychosis and, 1420
psychotherapy and, 5978
source, 2002
(See also *Magic*)
Surgery interest, heredity, 3800
Suspicion, 160
Swarming of ants, 536
Sway and attention, 484
Sweat inhibition, cat, 2259
innervation, cat, 2257
secretion, cat, 2260
Swim bladder, fish, 1834, 1835
Symbolism, megaliths, 4019
phonetic, 2461, 2512
sex, in package design, 3492
similarity and, 2675
Sympathetic and adrenalin, 4335
blood volume and, 1280
cardiac nerve impulses, 1276
dilator fibers, 2254
effects on muscle, frog, 2773
epilepsy and, 3424
ether and, 5661
headache and, 3196
heart forms and, toad, 3785
influence on chronaxy, 4341
injury and repair, 3216
ischiadicus and, cat, 2824
muscular chronaxy and, 5711
nerve discharge, 4329
parasympathetic effects, 2747
pruritus and, 1730
retina and, 3152
sensitivity and, 1903, 5689
striate musculature and, 3710, 3725, 4390
tetany and, 3300
Sympathin and excitation-inhibition, 4361
Sympathy, 231, 830
Symposium, vision, 2734
Syncretism, 1785
Synesthesia, motor, 453
theory, 5627
voice, 2717
Synoptophore, 2207
Synthesis, Wundt on, 4217, 4239
Syphilis, meningeal involvement, 4641
nervous system, 4581
psychosis and, 964
Syringomyelia, 3880
System in psychology, 392, 1671

Tabes, insurability in, 1402
psychoses, 2384
Tabu, 1011
Bantu, 719
body, 2865
Tachistoscope, 400, 2177, 4253
Tactile, see *Touch*
Talent, mathematics, 363
musical, 726
(See also *Genius*)
Tangent meter, 3121
Tantalus experience, 4506
Task, unusual, 3750
Taste blindness, 1687
bud innervation, catfish, 5635
disturbances, 2230
heredity, 1343, 3137
infant, 1552
stimuli, 4276
(See also *Gustation*)
Teacher adjustment, 2136
college, intelligence test, 1579
personnel service, 2146
test, 6098
education, experience, 1151
improvement, 2116
kindergarten, first position, 6106
mental hygiene, 4871
personality, 4126
interest, 2616
pupil preference, 6081
personnel work and, 1605
prediction of success, 2126
preparation, 1142
subjects taught and, 4152
psychosis, 3933
-pupil adjustment, and mid-year promotion, 4819
selection, interview in, 2982
training, bibliography, 4804
college, 4798
tests in, 2135
(See also *Pupil, School*)
Teaching aptitude, 3049
cinema in, 1587, 6096
efficiency, college, 4140
English, 4832
geometry to blind, 1133
high school, 1141, 2134
honesty, 1134
individual, 2145
insight in, 474
language, 358
mathematics, 2140
methods, 4086
psychology, 4814
principles, 3560
psychology, 4837
reading, 752
blind and, 1140
writing and, 4862
record, 2124, 2629
remedial, 4840, 6070
science, 3050
sound pictures in, 4097
statistics, 3586
study methods, 6090
(See also *Education, Instruction*)
Technology, 3970
Technopsychology, Russia, 1511
South Africa, 1530
(See also *Psychotechnics*)
Telegraphy, learning, 1514
Telepathy and psychoanalysis, 3808
Temperament, 3324, 3827
blood type and, 2377
rating, 3828
sex and, 2345
(See also *Character, Personality*)
Temperature and activity, rat, 560
body, and parathyroid, 5721
effects, *Daphnia*, 1337
tortoise hibernation, 3286
infant, 1552
learning and, rat, 4440
menstruation and, 1770
pain sensations, 4274
psychic effects, 3756
rhythm and, 3755
sensation in burned skin, 2715
sense, 1236
skin, and attention, 4313
cold-pain threshold and, 2738
sleep and, 3843, 5809
work and, 3233
(See also *Heat*)
Tempo, personal, heredity of, 4472
Tenderness, viscero-cutaneous, 3163
Tendon reflex, cat, 3254
Tension and intensity in reading, 5622
learning and, 522
maze learning, 884
muscle, and glare, 4288
relief, 5714
Tensor tympani in audition, 3278
Teratology and ontogeny, 5
Terman group test, 6120
Terminal and olfactory nerves, 82
Terminology, 2698
psychology, 1650, 2689
psychotechnical, 4025
Test, abnormal child, 4069
accident proneness, 4031
achievement, 1586
activity curriculum, 6075
elementary school, 2601
high school, 761
marks vs., 1604
algebra aptitude, 4145
Alpha, in diagnosis, 4210
apprentice, 287
aptitude, 3488, 6111
medicine, 2133
school, 2132
selection by, 3509
validation, 722
worker, 286
arithmetic, 4095
art, 4895
judgment, 4662
ascendance, revision, 3587
assets, 2141
association, Chinese, 72
presidents, 6094
athlete, 523
attention, 5656
attitude, criteria, 1184
aviator, 4033
Ballard, in Belgium, 1173
bar straightener, 280
Bernreuter personality, validity, 3588
Bernstein, 1643
bibliography, 3097
Binet, 1635
Brazil, 6122
examiner influence, 1639
item analysis, 4204
Pintner vs., 1637
revision, 4894
Bourdon, 4201
character, 2328, 2329
review, 5828
chauffeur, 5997
chemistry, 1591
clerk, 290
college aptitude, 348
intelligence, 4196
level, 5560
color vision, 3665
constancy, preschool child, 1638

construction, bibliography, 6116
courses in teacher training, 2135
cutting, 4906
definition, 4907
dentist, 4035
design, 4668
dexterity, 510
diagnostic, validity, 6057
directions, 3594
drawing, validity, 4193
driver, 2044
early, and school progress, 4851
educational, college, 2626
measurement, 1595
review, 6077
emotion regression in, 5898
sex difference, 4301
employment, 5989
English, 361, 2636, 2639, 2650, 2652
completion, 4099
placement, 6103
essay vs. objective, 2105, 6102
reducing variability of, 6100
evaluation, 2663
executive, 4724
fatigue in, 4197
form building, 775
games as, 4749
geographical perspective, 2100
Goodenough, 1636
graduate student, 6083
Hungary, 4889
Indians, 2022
infant, 5562, 6119
inferiority feelings, 4514
intelligence, 376, 377, 379, 1172, 2664, 2669, 3092, 3105, 4903, 4904, 4891, 6129
African, 2668
analysis, 2670
aptitude and, 1630
Binet, 4209
items, 380
Bobertag-Hylla, 4893
comparison, 4181
constancy, 375
4–8 years, 5564
mental age, 2672
misuse, 4821
motive in, 2162
norms, 373
prediction from, 4910
preschool child, 2164
puzzle, 4897
ranking, 5570
review, 6123
short, 4174
student, 2113
teacher college, 1579
time in, 1174
interest, 3103
scoring, 4207
introversion, 582
item, difficulty, 1166, 4179
reliability, 368
validity, 1632
Jewish history, 2130
Kohs, 4182
Kuhlmann, in hypophrenia, 4887
law aptitude, 2947
learning, individual differences, 5568
length and reliability, 4159
linearity, 367
maladjustment, 3590
manual, 760, 3564
South Africa, 4203
marking, 1589
maze, Porteus, 6124
McCall, reliability, 4187
mechanical ability, 378
critique, 2160
medical aptitude, 2608
memory, 3024
method, 1146, 2163, 4852
paresis, 5851
Mexicans, validity of, 232
Michigan non-verbal, 1175
motor, 3250, 5709
ability, 4070
multiple choice, 4901
chance in, 770
response, presentation effects, 1603
music, 1028, 1059, 5928, 5957
appreciation, 4671
capacity, 5975
neuroticism, 1645
noise, 301
nurse, 1521
objective, 1183
item evaluation, 6065
review, 2161
occupational, and employment, 5986
olfaction, 3139
paresis, 5850
performance, 4886
child, 3589
personality, 611, 1185
clinic, 1892
critique, 2861
differential factors, 1382
intercorrelations, 3869
Pintner-Paterson, 4195
Porteus, in delinquency, 3993
practical intelligence, 4908
practice, criticisms, 4106
preschool, 4186
Pressey, 4489
Downey vs., 4899
reliability, 4175
program, 2142, 4868
Kentucky, 2599
progressive schools, 3565
prose appreciation, 347, 1573, 3561
psychology, 1145
psychoneurotic, validation, 331, 345
psychopathology, 4888
psychotechnical, 2046
diagnostic value, 5996
evaluation, 4892, 4902
public opinion, 4648
reading, 1599, 2640, 6069
aptitude, 3581
first grade, 4847
primary, choice, 4098
reliability, 4873
fore-exercise effect, 2612
length and, 3096
Rorschach, 1182, 2671, 3104, 5567, 6127
diagnosis and, 623, 772
mescalin and, 5830
psychoneurosis and, 1641
psychopathy and, 3378
scholastic aptitude, 1170
school, 2150
adjustment, 4143
readiness, 2112
science aptitude, 2153
score combination, 4858
evaluation, 4909
scoring, 1578
directions and, 3076
method, 1629
shoemaker, 1085
skill, 4410
social behavior, 3975
space thinking, 3487
special ability, 4833
speed factor in, 3591
spelling, 4096
standard vs. home-made, 763
Stanford Binet, 1181, 4206
brightness and, 4198
reliability, 4900
station master, 4027
suggestibility, 605
teacher college, 6098
Terman group, 6120
textbook, 5566
Thorndike, reliability, 4913
Thurstone neurotic inventory, 1176
trade, 5985
troublemen, 300
true-false, chance correction, 1177
guessing, 4185
oral, 4101
review, 6121
tuning fork, 3140
types, 1136, 4189
usage, 6112
validity, 4037
vision, 32, 2219, 3136
vocabulary, 4109
college, 5565
difficulty, 4192
selection, 4911
vocational selection, 1529
weighted-item, scoring, 381
work in 1932, 6125
X-ray operator, 281
(See also *Form board*)
Testimony, 3473, 3698, 5652
accident and, 5651
child, 742
delinquency, 3474
record of, 5942
twins, 2593
Tetany, 3260
sympathetic and, 3300
thyroid disorder, 499
Tetrad, mean, 768
probable error, 1623
Textbook, abnormal psychology, 3367
adolescence, 6013
character, 588
child psychology, 4072
educational, 6063
psychology, 1590, 1601, 6079, 6099
nerve pathology, 4613
neurology, 86
Chinese, 493
philosophy, 1652
physiology, Chinese, 3058
psychiatry, 5847
psychology, 11, 19, 25, 780, 1192, 1197, 1658, 1672, 1675, 3616, 4234, 5586, 5591
abnormal, 652
educational, 420
work book, 4236
social psychology, 681
studies, difficulty, 2609
sociology, 4694
statistics, 4877
tests, 5566
work book in psychology, 3119
Texture judgment, wool, 2040
Thalamus and reflex excitability, 1773
syndrome and skull fracture, 4528
Theater, psychic functions, 1444
(See also *Drama*)
Theelin effects in castration, 4426
(See also *Hormone*)
Theft, 2937, 3973
girl, 3994
Therapy, child, 1916
occupational, dramatics, 3407
psychosis, 3404
shock, 3943
speech, 1502
Thesis abstracts, 7
Oklahoma, 751
Thirst as maze incentive, 2296
Thorndike test, reliability, 4913
Thought, 68, 4314, 4321
action and, 4290
action current and, 477
analysis, 405
child, 4763
context, 2170
experience vs., 241
hypophrenia, 2386, 4779
methods, 2252
nature of, 78
primitive, 3184, 5931
child, 737
research methods, 70
secondary school, 3582
structure, 478
success of, 1727
systems and ego, 4247
type, child, 2251
will and, 2761
(See also *Abstraction, Concept, Idea, Reasoning, Reflection*)
Threshold apparatus, animal, 3612
apparent lesions with, 2256
binaural, 2712
brightness, 457
conditioning near, 1783
frog nerve, 3190
learning, 4319
olfactory, 1697
stimuli, form, 49
twitch, frog muscle, 5720
(See also *Limen*)
Thumb sucking, infant, 318
monkey, 4049
Thurstone Personality Schedule, 1176
Thyroid disease, 506
disorder, 651
tetany and, 499
disturbance, psychogenic, 4599
neurosis, 627
nystagmus and, 520

psychosis, 4634
salivary reflex and, 1298
Tic, cure of, 869
douloureux, 5873
Timbre, piano, 5924
Time attitudes, 1992
budget, military, 2052
concept, 5642
configurations, 5608
difference in senses, 456
discrimination, rat, 2307
errors, 2217
estimation, 5620
review, 3683
interval comparison, 2703
marker, 1208
measurement device, 3605
music, 692
perception and muscle strain, 4285
pitch and, 2236
psychopathology of, 190
recording apparatus, 4218, 4226
relations in conditioning, 856, 4383, 4400, 4402
nerve impulse, 1741
sense, 828, 3841
bee, 3271
eidetics and, 816
psychosis, 2455
space errors and time, 2226
test administration, 4189
work and, 1084
Timing apparatus, 421
Tissue chemistry, 2261
Toad habits, 1831
sympathetic and heart forms, 3785
Tolerance, 5966
Tonality, Japanese, 2532
Tone, evaluation, 1508
interval discrimination, 5961
phenomenology of, 2215
pitch grouping, 2227
quality, 5924
(See also *Music*)
Tonus, 2281
arthropod, 3793
bulbocapnin, 94
face muscles, 1318
muscle, 4368, 4380
sleep loss and, 921
theories, 3245
(See also *Muscle*)
Tool arrangement, 285, 294
use, monkey, 3285
Tortoise, hibernation, 3286
Totemism, 1011
Touch, anesthetized, 1695
apparent movement in, 2223
duration limen in, 3155
fibers, 5674
fish, 3284
illusions, pathological, 5615
localization, 4283
perception, 4267
psychophysics, 443
reading of blind, 1222
recognition, blind, 5625
monkey, 4459
sensation, 5638
visual acuity and, 4278
Toy preference, child, 2558
usefulness, 1105
Trade mark confusion, 2502
retention value, 5992
school intelligence, 3574
selection, 1555
tests, 5985
Tradition, bee, 4462
insect society, 1840
primitive, 2015
Traffic behavior, 1531
problems, 1517
Training, apprentices, 2043
dog, 4467
mental health worker, 5876
military, 2048
occupation and, 3585
transfer, 3736
vocational, 2546
(See also *Learning, Skill*)
Transfer, 3697
bilateral, 877
conditioning and, 871
motor learning and, 346
conditioning, 4409
elements, rat, 2303
fatigue, 862
language, 4122
learning, 3547
maze, 470
study method and, 1122
training, 3566, 3736
arithmetic, 2641
college, 3568
Transference, affective, 3836
delinquent and, 2465
love and, 2374
(See also *Rapport*)
Transformation in skewness, 1165
Transparency, form, color, 2211
Trauma and alcoholism, 3934
Basedow and, 3422
brain, 670
capitis, 4587
cerebral, and olfaction, 5866
concussion and, 4534
effect, 633
hydrocephaly and, 1390
parkinsonism, 4530
psychosis, 4541
schizophrenia and, 2451
Treatise, psychology, 1654
Tremor and fatigue, 864
heredity, 130
stuttering and, 1040
Trichromatism, 3138
Triplets, behavior, 5775
case study, 2832
similarity, 5764
(See also *Quadruplets, Twins*)
Triton, eye variation, 1833
Troland, L. T., obituary, 383
Tropism, beetle, 2302
galvanic, *Hydra*, 1821
strychnine, *Daphnia*, 528
(See also *Geotropism, Phototropism*)
Troubleman, test, 300
Truancy, 307
studies, 3042
True-false test, review, 6121
Truth, action and verification, 2693
concept, 3600
sociology of, 2009
Tuberculosis, attitude in, 653
psychology, 3347, 3957
psychosis and, 2903
schizophrenia and, 4549
type in, 2419
Tumor, frontal, 4547, 5839
symptoms, 4610
Turbellarian, survival conditions, 1803
Turtle, olfaction, audition, 3292
Twilight vision, after-image, 1226
Twins, 2320
character traits, 564
credibility, 2593
crime and psychosis, 3314
epilepsy in, 5773
eye defects, 1717
handedness, 1864
handwriting and drawing, 1351
hypophrenic, 2322
intelligence, 565, 3308
language development, 315
mental traits, 3315
Mongolism in, 4476
motor skill, 2833
occupational interest, 1342
personality, 907
psychosis, 563, 2432
crime and, 5761
simultaneous, 4594
reared apart, 128, 1348, 5768
reputation difference, 3310
research, 562, 2834
schizophrenia, 3355, 3393
studies, 905, 1859
traits, 5776
(See also *Quadruplets, Triplets*)
Twitch threshold, frog muscle, 5720
Type, 1374
child, 2090
conditioned reflex and, 108
criminal, 5973
derivation, 5793
doctrine, 2548
criticism, 195
eidetics and, 67
face and legibility, 4000
form and word perception, 4707
heredity and, 4487
legibility, 4018
conditions, 705
libido, 2343, 5795
location, 2353
method in archeology, 5936
Polish, 2530
psychology in education, 6082
study, 3844
tuberculosis in, 2419
work, 1081
Typewriter in school, 364
Typhoid psychosis, 4576
Typing rhythm, 5990

Ulcer, gastric, and worry, 5646
Ultraviolet perception, bee, 4446
Unconscious, 153, 5782
concept, 5814
education and, 1596
personality and, 5792
states, reflexes in, 5719
status, 5779
(See also *Psychoanalysis*)
Unemployed, education, 2131
Unemployment attitudes, 4024, 4681
effects, 1473
scholarship and, 4806
settlements, 291
social psychology, 225
(See also *Employment*)
Unpleasantness, treatise on, 1718
(See also *Pleasantness*)
Urban, see *City*
Urine glucose, Chinese student, 3729
retention, psychogenic, 942
Uterus position and lifting, 3249

Vagus, cat, 2801
components, 490
excitability and serum, 5685
fibers, 1744
gastric, 5681
gastric, reversal, 2253
respiration and, 1791
reversal, 4333
Validation against fallible criterion, 4160
Validity, 2154, 4873
Bernreuter scale, 3588
child development principles, 4074
examination, 767
Goodenough test, 4193
graphology, 3968
item, psychoneurotic inventory, 331
Pressey test, 4175
rating scale, 354
test, 4037, 4189
items, 1632
inferiority feeling, 345
length and, 3096
Value concept, 2033
experience, 3986
moral, 1470
philosophy of Nietzsche, 258
psychiatry and, 3885
psychoanalysis and, 602
religious, 3470
Variability, high school marks, 6054
instinct, 116
learning, 3180
marks, reduction, 4856
reduction, essay test, 6100
scholarship, 4809
temporal, 2837
Variance, analysis, 1625
Vasectomy and conditioning, dog, 3733
Vaso-motor reactions, study, 5680
Vector and cognition, 4231
Lewin, 419
Vegetative influence by hypnosis, 4480
Ventricle dilation and maze learning, rat, 3288
III, cyst, 613
Veratrine effects, frog nerve, 5670
Verb theory, 5938
Veronal effect on work, 5820
Vertebrate, see *Amphibian, Bird, Fish, Mammal, Reptile*
Vertigo, optokinetic, 3170
Vestibular reaction and labyrinth, dove, 5736
(See also *Labyrinth*)
Vibration effect on body, 1324
sense, 456, 2200
Viper, food capture, 2825

Viscera and cortex, 4359
disease, skin tenderness in, 3163
sensitivity, 1681
Visibility, projector, 3130
variable, 3143
Vision, 1684, 3161
accommodation, 1702
acuity, 47, 1709, 2720, 2736, 3640
background and, 3636
charts, 10
glare and, 3628
monocular, 1232
peripheral, 815
angle, 3649
anomaly, 30, 39
aphakic, 2207
apparent movement, 2206, 2719
audition vs., quickness, 3162
bee, 1847
binocular, 1215, 1716, 5611
blind spot, 3145, 3688
brain area and, rat, 1333
brightness and adaptation, 3624
child, 809
clam, 3289
color, 35, 1708, 2228, 2233, 3623, 4282, 4294
chicken, 526
constancy, 428
field, 50, 3666
peripheral, 2714
personality and, 2218
rat, 1335
conditioning, bird, 3768
cortical representation, 5675
defect, 3151, 5639
child, 3055
compensation and, 3677
depth, 3657
discrimination, dog, 1332
entoptic phenomena, 813
esthetics and, 2238
estimation by, 2197, 2209
experiments, wink control, 40
eye movement and, 2225
field and brightness, 1707
determination, 2229
estimation, 2198
narrowing, 445
reaction time and, 1257
form field, 3142
perception, 2704
frog, 3795
fusion, 3626
laterality and, 2787
hereditary defect, 826
history, 3635
illusion, 426, 4281
image, 800
difference correction, 820
psychosis, 1431
light discrimination, rat, 5732
localization, 433
maze learning, 1758
melancholia, 3403
movement, 2722
perception, 1711
old age, 1703
orientation by, 3634
pathways, tumor in, 429
perception, speed, 4295
peripheral movement perception, 2735
perspective, laws, 5624
pigeon, 2810, 2811
psychophysics, 441
pupil incidence, variations in, 2729
reaction time, 5631
regression, 2731
retinal conversion, 3639
rod and cone function, 3682
snake, 2304, 3791
space value constancy, 448
speed and pupil size, 808
stereoscopic, 1239, 3653
rivalry, 5637
symposium, 2734
test, 32, 2219, 3136
twilight, after-image, 1226
ultraviolet, bee, 4446
(See also *Accommodation, Acuity, Adaptation, After-image, Ametropia, Astereognosia, Astigmatism, Blindness, Brightness, Campimeter, Contrast, Convergence, Diopter, Eye, Field, Flicker, Glare, Hemianopsia, Horopter, Illumination, Image, Intensity, Light, Micropsia, Myopia, Periphery, Presbyopia, Refraction, Rivalry, Rod, Scotoma, Spectrum, Squint, Stereoscopy, Transparency, Trichromatism*)
Vital index and social factors, 2957
Vitalism, 3108, 3118
Vitamin deficiency, dog, 890
night blindness and, 1704
Vividness in learning, 3693
Vocabulary ability, heredity, 122
arithmetic, 4848
basic, 3998
difficulty, 4192
frequency, 2941
psychotechnical, 4026
spelling, 2630
test, 4109
college, 5565
selection, 4911
(See also *Language*)
Vocation ability patterns, 2064
test, 4833
adolescence and, 3515
choice, 1510
factors in, 6062
girl, 360
intelligence and, 2543
school and college, 3505
student, 725
constitution and, 2037
counselor, traits, 6078
deafness from, 5634
education, 3072
efficiency, deaf mutes, 282
guidance, 756, 1522, 2049, 2054, 2598 3067, 3503, 6003
abnormal and, 3919
child, 2994
color vision in, 1698
delinquency, 1990
efficiency, 4103
intelligence in, 1172
measurement, 356
results, 6001
Russia, 352, 2556, 3068
school, 3558, 3569
Spain, 6000
student, 6005
handicapped, 2485
history, educators, 765
interest, 2552
child, 4758
college, 4719
selection, 2046, 2546, 3489
selectivity of college, 6095
success and intelligence, 1529
prediction from photographs, 4744
woman, 2988
(See also *Occupation*)
Voice, 2021
alteration, 173
control, child, 2538
endocrines and, 2007
fatigue, 1494
innate qualities, 4023
mimicry, 3976, 4656
personality and, 4690
pitch, conditioning, 4414
sex and, 269
singing, 1054
structure, 2492
synesthesia, 2717
therapy, 1975
training and speech defect, 2973
(See also *Larynx, Speech*)
Volition, 1315
basis of psychology and, 29
conditioning and, 4379
learning and, 3181
reflex and, 1784, 4401
(See also *Will*)
Vomiting in neurosis, 2350
Von Frey, M., contributions, 5628
Voodoo, 2980
(See also *Fetishism*)
Voting behavior, 1499
concomitants, 3445
Vowel theory, 2027

Wage system, 3497
Waking, 922
Walking, child, 3534
(See also *Gait*)
War attitude, church, 1978
college, 2972
student, 1980
Warming-up effect, 4411
Ward, L. F., letters, 2023
Wasp, language, 4463
male, origin, 4464
sex, mosaics, 1846
Wealth and ability, 4649
Weber law, 804, 3169
Weight and body type, 2585
child, 3523
handwriting and, 3966
intelligence and, 1583
lifting, 4262
nationality and, 3053
strength, insect, and, 2813
Weiss, A. P., obituary, 413
Welfare, church, 259
Western Psychological Association, proceedings, 1209
Wetness, cues to, 3153
Wever-Bray effect, 1682
Whole and part, 5606
learning, 1153
(See also *Distribution*)
Will, 107, 3765, 4484
choice and, 101
determination in, 103
differences, 872
education of, 1776
free, 1646
initiative and, 1756
reflection and, 93
self-determination and, 2364
thought and, 2761
(See also *Volition*)
Wink control, 40
reflex, 886, 3758
(See also *Eye*)
Wish, adolescent, 344, 744
child, 1554
content, 3841
dream content and, 1897
Wit, 1378
personality and, 143
(See also *Humor*)
Withdrawal, college, 1597
social, 5821
Woman, age and adaptability, 3437
body type, 4384
college, fertility, 1850
leaders, 701
education and success, 6107
family vs. occupation, 1015
history, 2968
homosexuality, 142, 2341, 4002
interest development
personality, 1873
prison psychosis, 3396
prisoner, neuroticism, 1463
problems, 249
psychoanalysis, 1865
psychosexual growth, 2840
psychosis, 668
sex development, 148
vocation, 2988
(See also *Coeducation*)
Wool texture, judgment, 2040
Word, affective value, 467
associations to color, 4029
comprehension, dog, 899, 3296
consciousness, Jews, 2521
counts, combination, 2941
foreign, use of, 1456
meaning, child, 3538
value, 3703
perception in reading, 4707
use, 4644
(See also *Language*)
Work, 721
ability, epilepsy, 1931
accident, 4731
analysis, 5991
ankle, 1768
attitude and neuroticism, 1086
blood pressure in, 1792
capacity factors, dog, 5697
change and efficiency, 4726
chronaxy and, 1292, 4358
close, eye effect, 1691
conditioned reflex and, 5713
conditions, 4040
efficiency and, 6006
decrement and practice, 106

domestic, child, 2592
effect on acidity, gastric, 99
energy cost, 1789
environment and processes, 2983
fluctuations, 4317
girl, 1986
guidance, personnel, 1525
habit and movement measurements, 3817
high pressure, 4311
incentive, 2055
instructions, 2056
intellectual, organization, 2059
lath, physiology of, 4743
light and, 1523
mechanic, 2057
mental, 2244, 3702, 4309
child, 5649
practice and energy cost, 483
psychophysics of, 4883
military, 2048, 2052
minors, Russia, 3029
muscle, 2784
brain effects, 3212
oxygen supply in, 2774
organization, 1519
home, 1075
institute, Russia, 2042
output, rat, under stimulation, 893
personality in, 2987
physiology, 3234, 4736, 5993, 5995
play and, 102
protein metabolism, 1800
psychology, 2550
ambivalence and repression in, 2554
quality and speed, 2061
rate, 289
record in education, 3508
rhythm, 3501
agriculture, 5994
speed and, 2775
school, 4802
science, 2551
speech and, 4647
speed and accuracy in, 3507
temperature and, 3233
time, 1084
type, 1081
variation with gas mask, 2041, 2047, 2062
veronal effect, 5820
(See also *Effort, Fatigue*)
World, external, reality belief, 3655
Worry and digestion, 5646
Wundt on apperception, 4248
birth centenary, 2184
concept of psychology, 4214
creative synthesis and, 4217
doctorate students, 418, 2172
life of, 4238
modern tendencies and, 4216
obituary, 4229
psychology of, 397
synthesis and, 4239
X-ray operation, test, 281
Yoga, 1883, 3857
training, 936
Youth, problem, 1558
education and, 2533
history, 3532
sex life, 1551
(See also *Adolescence*)
Zsch. f. Psychol., index, 782

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